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ABSTRACT

A study investigated interrelationships between educational background and membership in "groups of special interest" -- women, blacks, Hispanics, Native Americans, Asians, persons of low socioeconomic status (SES), handicapped individuals, and persons with limited English proficiency. Data were from the High School and Beyond sample and the sample from the National Longitudinal Surveys of Labor Market Experience Youth Cohort. The secondary vocational education curriculum attracted, in disproportionate numbers, youth with low SES, lower ability, and feelings of personal inadequacy. White men were most likely to enroll. Within the vocational education curriculum were pronounced gender differences by specialty. The likelihood of continuing education beyond high school was significantly greater for youths of higher SES, greater ability, and higher self-esteem. A secondary vocational curriculum paid off in earnings for youth subsequently employed in jobs related to training. Significant gender differentials in earnings existed. Regarding race and ethnicity, no statistically significant earnings differentials favored whites. Policy measures were implied by the absence of racial labor market discrimination, absence of racial and ethnic earnings differentials, and overrepresentation in vocational education of students with low self-esteem and their subsequent lower educational and la or market achievement. (YLB)



OUTCOMES OF VOCATIONAL EDUCATION FOR WOMEN, MINORITIES, THE HANDICAPPED, AND THE POOR

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FOREWORD

An understanding of who is served by secondary vocational education is useful to the formation of educational policy. In addition, the labor market effects for those served are of equal concern to educators. Research has indicated that racial/ethnic minority groups, and individuals with low socioeconomic status, handicaps, and limited English proficiency may not have equal access to all parts of the secondary education curriculum. Moreover, research has documented the extent to which these special groups (including women) lack equitable economic success in the labor market. This study builds upon previous work relating to the effect of secondary curriculum, primarily vocational, on the labor market experiences of special groups.

The intended audience for this report is made up of both policymakers and researchers in vocational education. The executive summary and chapter 5 provide succinctly stated conclusions and discussions of these implications. Chapters 2, 3, and 4 provide the background and support for the conclusions. These chapters also lay out the methodology and results in a form useful to researchers who may wish to replicate or build upon the research reported here.

The combined data from the National Longitudinal Survey of Labor Market Experience, Youth Cohort (NLS-Youth) and the high school transcripts of a subsample of this survey are major sources of the information analyzed. The NLS-Youth survey was developed by the Center for Human Resource Research at The Ohio State University, with support from the U.S. Departments of Labor and Defense. An additional source of data is the High School and Beyond longitudinal survey (HS&B) with a subsample of high school transcripts from this database, funded by the National Center for Education Statistics. The National Center for Research in Vocational Education extends its appreciation to the Office of Vocational and Adult Education, U.S. Department of Education, which funded the National Center's analyses of these two databases and the effort to collect transcripts.

This study was conducted in the Evaluation and Policy Division of the National Center under the direction of N. L. McCaslin, Associate Director. Paul B. Campbell, Senior Research Specialist, served as project director. John Gardner, Economist at the Workers Compensation Institute, and Robert M. Thorndike, Professor of Psychology at Western Washington University, contributed to the design of the analyses by providing thoughtful suggestions and ideas. Additionally, we thank Research Specialist, Debra Bragg; Program Assistants, Mary Beth Dauner and Marie Parks; and Graduate Research Associate, Karen Basinger, for their work in preparing this report. Herbert Parnes, Professor Emeritus, The Ohio State University, while serving as a Visiting



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EXECUTIVE SUMMARY

The fourfold objectives of this study are to ascertain the following:

- What environmental factors and student characteristics—including members in in selected population "groups of special interest"—are associated with enrollment in the several high school curricula. The groups of special interest are women, blacks, Hispanics, Native Americans, Asians, persons of low socioeconomic status (lowest quartile), the handicapped, and persons with limited English proficiency (LEP).
- o How high school curriculum and membershir in the groups of special interest affect the extent and character of postsecondary education.
- O How high school curriculum affects subsequent success in the labor market (controlling for postsecondary education), and whether the effects appear to be the same for each of the groups of special interest.
- O How membership in each of the groups of special interest affects labor market experience when both educational experience and other personal and environmental characteristics are controlled.

To meet these objectives two longitudinal data sets have been used, each based on a representative national sample of high school graduates: the High School and Beyond (HS&B) sample and the sample from the National Longitudinal Surveys of Labor Market Experience Youth Cohort (NLS-Youth). Although neither was designed specifically for the purposes of the present study, each is remarkably rich in the data required for the analysis and has been supplemented by collection of high school transcripts for a subsample of respondents.

The data have been analyzed primarily by means of multivariate techniques, so that all relationships that are described in the findings are net relationships—that is, they reflect statistically significant coefficients in a multiple regression model with appropriate controls for other variables.

Determinants of High School Curriculum

The high school vocational education curriculum attracts, in disproportionate numbers, youths from the lower socioeconomic strata, rural youths, youths of lower ability (as measured by



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conventional intelligence or academic achievement tests), and youths with feelings of personal inadequacy (low self-esteem). Hispanic, black, and Asian men (but not Native American), are less likely than majority white men to enroll.

specialty within the vocational education curriculum. For example, Trade and Industry substantially overrepresents males, while Business substantially overrepresents females. I mong the specialties with lower enrollments, males are overrepresented in Agriculture and underrepresented in Health Care.

Determinants of Postsecondary Education

The likelihood of continuing education beyond high school is significantly greater for youths of higher socioeconomic status, greater ability, and higher self-esteem; youths with more favorable high school grades; and youths from urban environments. There are also differences by race/ethnicity in the likelihood of further education. Hispanic and black high school graduates—men and women alike—are significantly more likely than majority white men to continue their education. Although graduates of the academic curriculum are more likely than those of the other curricula to continue their education beyond high school, vocational graduates are just as likely as general graduates to do so.

When attention is confined to those who continue their education beyond high school, there are differences ac ording to both high school curriculum and race/ethnicity in the type and extent of further education. By and large, the same factors that channel youths into the vocational curriculum in high school tend to channel the high school graduates into vocational, trade, or business schools (as opposed to 2- or 4-rear colleges). Moreover, even with these factors controlled, graduates of the high school vocational curriculum are more likely than those from the general curriculum to enter these types of schools. Hispanics and blacks are less likely than majority whites to do so.

Among high school graduates who enter 2- or 4-year colleges rather than vocational, trade, or business schools, those from higher socioeconomic status (SES) backgrounds, with greater ability, with better high school grades, and with higher self-esteem go into the 4-year programs. Controlling for these factors, black men and women are more likely than majority white men to do so.

<u>Earnings</u>

Pursuing a vocational curriculum in high school has a payoff in hourly and weekly earnings for youths who are subsequently



employed in jobs related to their training. However, the favorable results for the vocational curriculum are tempered by the fact that well over one-half of the workers whose high school transcripts indicated a vocational program were working in jobs apparently unrelated to their training; for these persons no earnings advantage is discernible.

Variations in the extent of postsecondary education (other things being equal) make a substantial difference in hourly and monthly earnings. Persons with 4 or more years of postsecondary work have an earnings advantage of 20 percent or more over those who ended their education with graduation from high school.

With education and other factors related to productivity controlled, significant gender differentials in earnings remain. Depending on the sample and the measure of earnings used, white females earn from 8 to 28 percent less than white males, and differentials of about 10 percent or more prevail among blacks, Hispanics, and low-SES individuals of all races. With respect to race and ethnicity, on the other hand, no statistically significant earnings differentials appear in favor of majority whites, once other characteristics are controlled. Specifically, the earnings of white males do not differ significantly from those of Native American males may constitute an blacks or Hispanics exception to the generalization. While there are too few of them for confident estimates, it appears that their earnings may be lower than those of otherwise comparable whites. Among women, none of the data show differentials in favor of majority whites, and in several cases significant differences in favor of blacks and Hispanics appear.

Labor Force Participation and Employment

both labor force participation and employment appear to be more continuous for graduates— he high school vocational education curr culum than for ot— gh school graduates. Black males have both less continuation force participation and less favorable employment experiences than their white counterparts. As would be expected, women of all racial and ethnic groups have lower rates of labor force participation than white males; black women also have less regular employment.

Interpretations and Policy Considerations

The absence of evidence of racial tabor market discrimination in this study is significant from a policy viewpoint, because it suggests the importance of keeping the Hispanic, black, and low-SES students in high school. There is reason to believe that reducing the above-average dropout rates of these



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groups would have an even greater effect on their subsequent labor market success than an equivalent reduction in dropout rates would have for whites.

The absence of racial and ethnic earnings differentials is encouraging; on the other hand, the pronounced gender differences that have been found in all of the analyses are cause for concern. It is difficult to avoid the conclusion that such differentials stem at least in part from differences in the socialization process for men and women that lead women into lower paying work. In this context, the goal of educational policy should be to eliminate the gender stereotypes that elicit this result. As a specific example, increased attention needs to be given to overcoming the overrepresentation of women in the vocational education specialties that are associated with low-paying jobs.

The positive earnings differentials for high school graduates of the vocational curriculum provide clearer justification for the program than most earlier studies provided, but the fact that the earnings advantages are confined to those in training-related jobs, coupled with the fact that this group constitutes only a minority of all vocational graduates, is disquieting. There is need to know more about the reasons that so many vocational graduates enter lines of work that are apparently unrelated to their training.

Two quite separate policy measures are suggested by the findings that students with low self-esteem are overrepresented in vocational education and that their subsequent educational and labor market achievements are lower than those of students with better self-images. First, from the vantage point of the student, anything that can be done in the schools to improve self-concept among those with low self-esteem will tend to reduce inequalities in educational achievement and labor market rewards. However, to the extent that such efforts are successful, they might lead to reduced enrollments in vocational education, if vocational education is perceived as a second-class curriculum. The appropriate policy objective in this context is to change the substance and/or image of vocational education in order to make it no less attractive to self-perceived "winners" than to self-perceived "losers".



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CHAPTER 1

INTRODUCTION

The Problem and Its Context

Problem

Education can be said to achieve excellence when it serves both individuals and society well. Vocational education is designed to serve society by teaching young people skills needed in many segments of the economy. In so doing the vocational curriculum contributes to the well-being of the country. At the same time, those involved in vocational education hope to enable young people to move toward their own individual goals.

A considerable amount of research has attempted to ascertain whether secondary vocational education provides a more effective preparation for the world of work than the other high school curricula, but the results have been inconclusive. Most studies that have made straightforward comparisons between high school graduates of the vocational and the general curricula have concluded that women seem to benefit more than men from vocational training (Grasso and Shea 1979). More recent studies that have controlled for training-related job placement have found an overall advantage for vocational education that is, however, considerably more pronounced for males than for females and that may not exist at all for racial and ethnic minority groups (for example, Campbell and Basinger 1985).

These uncertainties point to the need for additional research based on the best and the most recent available evidence. Moreover, in addition to the general question of the relative merits of vocational education, it is important to know whether that curriculum is differentially effective for subsets of the population that have traditionally experienced greater-thanaverage difficulties in the labor market: women, members of racial and ethnic minorities, the physically handicapped, and persons with limited English proficiency (LEP). Although there have been numerous labor market studies that document the disadvantaged position that most of these groups occupy, very little is known about whether the aducation-labor market nexus is different for them than for the rest of the population. specifically, it is desirable to know whether membership in these groups, other things being equal, affects the selection of high school curriculum, the extent and character of postsecondary education, and post-school labor market success. Answers to these questions are obviously important not only for evaluating Vocational education, but also for providing appropriate advice to these "groups of special interest."



Finally, it is important to recognize that vocational education is not all of one piece. Previous research has suggested that the labor market outcomes of vocational education may vary among the several areas of specialization. It is known, for instance, that women who graduate from trade and industry programs tend to have higher earnings than female graduates in general. Similarly, minority group women with office specialties earn more than other minority group women. These findings point to the need to at least ascertain the way in which the groups of special interest are distributed among the several vocational education specialties.

Objectives

The purpose of this study is to fill the gaps referred to in the preceding three paragraphs. More specifically, it will focus on the following issues:

- O Variation in high school curriculum among gender, racial/ethnic, handicapped, and LEP groups.
- o The effects of high school vocational education, relative to the general curriculum, and the effects of membership in the groups of special interest on the extent and character of subsequent education.
- o The effects of high school curriculum for the population at large and for the groups of special interest on several measures of labor market success: hourly and monthly earnings, regularity of labor force participation, and steadiness of employment for the total population and for the groups of special interest.

Data Sources

Evidence on the foregoing questions will be developed through both descriptive cross-tabulations and multivariate analyses of two National longitudinal data bases: The National Longitudinal Survey of Labor Market Experience-New Youth (NLS-Youth) and the High School and Beyond survey. The former is a representative National sample of 12,686 male and female youths interviewed for the first time in 1979; data from the 1983 follow-up are available for this report. The latter is a National sample of approximately 30,000 high school sophomores surveyed in 1980 and most recently in 1984. These two data sets constitute the most comprehensive and the most recent available data for exploring the kinds of issues described. Where both data sets point to the same conclusions, a high degree of confidence may be placed in their validity.



The remainder of this report is organized in the following manner. Chapter 2 reviews the findings of the relevant research literature—particular y relating to the effects of the vocational education corriculum and the status of the groups of special interest. C. ser 3 discusses the methodology and provides descriptions of the data sources. The findings are presented in chapter 4. The summary, conclusions, and implications for policy comprise chapter 5.



CHAPTER 2

BACKGROUND

This chapter begins with a presentation of demographic data on racial/ethnic minorities and on other "special groups" of primary concern in this report: Black Americans, Hispanic Americans, Asian-Americans, and Native Americans; and persons from low socioeconcmic status backgrounds; those with limited English proficiency; and those with handicaps. Next, several well-known labor market theories relating to minority group status are described. Lastly, research findings are presented on the impact of vocational education and special group membership on labor market status.

Demographics of Special Groups

Over the past several years, data compiled by the U.S. Bureau of the Census have documented the rapid growth rate of the country's racial/ethnic minority populations in comparison to that of the white population. In addition, demographic data have documented the substantial number of low socioeconomic status, limited English-proficient, and handicapped persons in the country today. Of interest to educators, particularly secondary vocational educators, is whether or not the diverse needs of such special groups are met by the educational system.

Black Americans

Black Americans are the largest and most visible racial/ ethnic minority group in the United States today. According to 1980 Census data (U.S. Bureau of the Census 1983), there are approximately 26.1 million blacks in the United States; they comprise 11.5 percent of the total U.S. population. Over half of this population resides in the southern states. However, more black Americans live in New York State (2.2 million) than in any other single state in the country.

Between 1980 and 1984, the black population grew at a more rapid rate than the white population (6.7 percent versus 3.2 percent) (Current Population Reports, March 1985a). Rates of growth, however, for both the black and white populations have declined dramatically since 1960--blacks by one-third and whites by more than one-half (Current Population Reports, July 1985).

In 1970, blacks constituted 89.7 percent of the Nation's racial/ethnic minority population. That proportion declined in 1982 to 82.5 percent. By the year 2000, it is estimated that the proportion of the Nation's minority population that is black will



be down to 78.9 percent (Current Population Reports, May 1984). In large part, the black proportion will decline due to the high net immigration of Asian and Spanish-speaking peoples and the high birth rates of these groups.

Hispanics

The Hispanic population in the United States is mostly, but not entirely, comprised of individuals of Mexican and Mexican-American, Puerto Rican, and Cuban origin. According to 1980 Census data (U.S. Bureau of the Census, May 1983), there are approximately 14.6 million Hispanics living in the United States (not including the estimated 8 million undocumented Spanish speaking residents); they comprise 6.4 percent of the nation's population. Of the Hispanic population, 60 percent are Mexican-Americans, 14 percent are Puerto-Ricans, and 5.5 percent are Cuban-Americans. The remainder come from other Latin American countries or Spain.

Residence is concentrated primarily in the South and West; of Mexican-Americans, 75 percent reside in either California or Texas; 60 percent of Cuban-Americans live in Florida; and 50 percent of Puerto Ricans reside in New York (U.S. Bureau of the Census 1980). Hispanics are the most urbanized racial/ethnic minority (87 percent live in metropolitan areas).

A report published by the Center for Continuing Study of the California Economy (1982) estimates that by the year 2000, the Hispanic proportion of the Nation's population will increase from 6.4 percent (1980) to 8.6 percent. That is, by the year 2000, a total of 23.1 million Hispanics, of whom only 2.8 million will be recent immigrants, will be living in the United States. Factors accounting for the projected growth of the Hispanic population over the next two decades are (1) Hispanic immigration, (2) the increasing proportion of women of childbearing age who are Hispanic, and (3) the high birth rate for Hispanics in comparison to other racial/ethnic groups.

Native Americans

According to the 1980 Census (U.S. Bureau of the Census, May 1983), there are approximately 1.4 million Native Americans (includes Eskimos and Aleuts) living in the United States. As of 1980, Native Americans comprise 0.6 percent of the entire U.S. population. A large proportion of this population resides in the southern and western regions of the country. Native Americans are the least urbanized of the racial/ethnic minority groups; place of residence of this population is approximately equally divided between urban and rural areas.



Approximately one-third of Native Americans continue to live on reservations. A primary factor to be considered when examining the labor force experience of Native Americans is their tendency to move back and forth between the reservation and the city (Almquist 1979). Consequently, tracking this population is particularly difficult.

Asian Americans

The racial/ethnic minority group of Asian-Americans described here includes individuals from many Asian subgroups (for example, Chinese, Japanese, Filipino, Vietnamese, Korean, and Hawaiian). Because each of these subgroups is relatively small, they are typically combined for ar lytical purposes under the broader Asian-American categoriza on, even though there is considerable cultural diversity a ong the subgroups.

The 1980 Census counted approximately 3.5 million Asian-Americans (U.S. Bureau of the Census, May 1983). Of the 3.5 million Asians residing in the United States, approximately 1.2 million live in California. Throughout this century the number of Asian-American residents in the Nation has steadily grown. In the 1900s they made up less than 0.3 percent of the Nation's population, growing gradually to 0.4 percent by 1950, 0.5 percent in 1960, 0.7 percent in 1970, and 1.5 percent in 1980. According to population projections, approximately 4 percent (9.9 million) of the U.S population will be of Asian origin by the year 2000. Even with such a growth in population, however Asians will remain the country's third largest minority after blacks and Hispanics.

Low Socioeconomic Status (SES)

According to Census data, approximately 13 percent of the population (29.3 million persons) lived below the federal poverty level in 1980--\$8,414 for a nonfarm family of four (Current Population Reports, September 1982). It is estimated that approximately 25 percent of all families in the United States earned less than \$12,500 in 1980 (Current Population Reports, August 1985). Poverty rates in 1982 differed widely among various racial/ethnic groups: 12 percent for whites, 35.6 percent for blacks, and 29.9 percent for Hispanice (Current Population Reports, July 1982).

Poverty levels are especially high among families maintained by a woman with no husband present. According to Census data, such families made up 48 percent of all families below the federal poverty level in 1980 (Current Population Reports, September 1982). Concentration of the poor in families with a female as head-householder is especially evident among blacks and Hispanics. Black female-headed households accounted for 71 percent



of all poor black families in 1980; in 1969 the percentage was 54. In 1982, 60.1 percent of Hispanic families maintained by women were below the poverty level, compared with 53.3 percent in 1978 (Current Population Reports. July 1982).

Limited English Proficient (LEP)

Over the past decade, the number of LEP persons in the country has grown rapidly. In 1980 approximately 30 million people in the United States spoke a native language other than English (these people are not necessarily limited in English proficiency). States reporting the highest percentages of LEP persons in the country are Texas, California, and New Mexico; Il States have LEP rates above the national average of 2.3 percent (Condition of Education 1983). By the year 2000, it is estimated that the number of persons whose native language is other than English will rise to 39.5 million (InterAmerica 1980).

According to a survey conducted by the U.S. Bureau of the Census (1976), persons whose native language is other than English have not experienced high levels of economic and occupational success. One study on the employment conditions of LEP youths (Passmore et al. 1982) estimated that during 1979 approximately 5.5 percent of 16 o 21-year-olds in the United States preferred to use a language other than English or reported that limited English skills impaired the comployment opportunities.

Handicapped

In <u>Vocational Preparation of Persons with Handicaps</u>, Brolin (1982) identifies the major disabilities that result in handicap status. They are as follows:

- o Mental retardation. Classifications range from mild to profound; prevalence in the general population is 3 percent, with the mildly retarded constituting 89 percent of this figure.
- o Mental/emotional/behavioral disorders. These include neurosis, psychosis, depression, manicdepression and schizophrenia diagnoses. Two to three percent of the general population have the serious mental disabilities listed here.
- o Spinal cord disabilities. Approximately 0.5 percent of the population has this disability, manifested as monoplegia, hemiplegia, triplegia, quadriplegia, or paraplegia.



- O Cerebral palsy. Slightly less than 0.5 percent of the general population suffers from this disability.
- <u>Epilepsy</u>. These include grand mal, Jacksonian, petit mal, and psychomotor. This condition disables about 0.5 percent of the general population in the United States.
- O <u>Visual impairments</u>. Included are individuals regarded as legally blind (can see with corrections) to those who are totally blind. This disability currently affects about 0.4 percent of all Americans.
- Hearing impairments. This category includes conductive, sensory-neural, and central impairment. About 6.3 percent of all Americans are hearing impaired.
- Dearning disabilities. Between 2 percent and 3 percent of the population suffers from learning disabilities, which include deficits in perceptual-motor ability, attention span, memory, and academic thinking/learning skills.

The United States Office of Education issued the following position statement through the United States Commissioner of Education on June 10, 1978: "An appropriate comprehensive vocational education will be available and accessible to every handicapped person." In the fall of 1979, only 2.5 percent of all students in vocational education programs were handicapped (Condition of Vocational Education 1981). This reported percentage is far below the percentage of 10 percent that one would expect based on the prevalence of those with handicapping conditions in the general school age population.

Approaches to Minority Group Labor Market Status

Evidence of race and gender effects on occupational achievement and income is pervasive. Minorities are concentrated in low-status occupations and earn substantially less than whites (Portes and Wilson 1976, Smith and Welch 1977, Johnson and Sell 1976). Women are concentrated heavily in traditionally female occupations and consistently earn less than men (Bridges 1982, Treiman and Hartman 1981, Mincer and Polacheck 1974). Several theories have been postulated to explain such race and gender disparities in labor market status.

Theories of minority labor market status differ in their emphasis on the importance of individual motivation, personal



family background, employer's role, and uncontrollable market forces as factors in depressing minority group success in the labor market. Some theories emphasize, to a large degree, the influence of family and individual choices. Other theories stress the nature of the economic system in sustaining labor force inequality. A brief review of the major theories is provided next. Basic tenets from most of the theories to be discussed were useful in formulating the analyses and interpreting the findings of the present project.

Status Attainment Model

The basic notion in the status attainment model (see Haller [1982] and Colclough and Horan [1983] for reviews) is that career statuses such as education, occupation, and income are passed from one generation to the next via a sequence of interpersonal parental status affects the status achieved by their processes: children indirectly through a chain of effects. The status attainment model holds that the social status of one's parents (as well as peers) affects the level of schooling achieved, which, in turn, affects the occupational status level that one achieves. According to this view, minority group members are handicapped because, generally, their parents have lower labor market status than members of the white majority. Empirical studies (Sewell and Hauser 1975; Otto and Haller 1979; Alexander, Eckland, and Griffin 1975) tend to support the status attainment model, although the model is not capable of explaining income attainment nearly as accurately as it explains educational and occupational attainments. In part, the present research is guided by this model.

Human Capital Theory

Human capital theorists (Blinder and Weiss 1976; Ghez and Becker 1975) portray individuals as having a choice or active role in their labor market future. Human capital models hold that individuals make a series of decisions that either add to or detract from their value as employees. These decisions and actions (for example, dropping out of school versus remaining in school; searching for a specific job versus taking whatever comes along) are viewed as investments in one's personal human capital, and this process of human capital accumulation determines the occupations for which individuals are eligible. Thus, human capital theorists are inclined to view male-female wage inequality as a result of the choices of women to work in overcrowded For example, women continue to enter and/or low-paying fields. secretarial or clerical fields that require little training (educational investment) and where supply far exceeds demand. In addition, women have long absences from the labor force for



childbearing and child-rearing purposes. Therefore, their work experience, also viewed as a possible form of human capital investment, is much less extensive than that of their male counterparts. Basic notions of this theory are considered in the present study.

Dual Labor Market Theory and Radical Economic Theory

Dual labor market theory (see Hodson and Kaufman 1982 for a critique) holds that the responsibility of individuals in controlling their occupational labor market future is offset by segmentation in the labor market. The labor market, according to Doeringer and Piore (1971), consists of at least two distinct segments—primary and secondary—that afford individuals very different opportunities in terms of wages, upward mobility, and job security. Minority group members tend to become trapped in the secondary labor market. Dual labor market theorists argue that it is this segmentation of the market, accompanied by labor market discrimination, that largely explains racial and gender inequalities in the labor force. A number of empirical tests of dual labor market theory have been made, but economists are still divided about its validity (Cain 1976; Dickens and Lang 1985).

Radical economic theorists (Wachtel 1972; Braverman 1974) pay little attention to individual skill and worker qualifications but instead focus on the class-based nature of production and relationships between employee and employer. Radical economic theory is largely rooted in Marxist philosophy and claims that capitalism necessitates poverty, inequality, and large numbers of poorly paid laborers. However, little formal testing of radical economic theories has occurred.

Although conceptualization of the present project did not rest heavily on dual labor market theory or radical economic theory, both theories are worthy to note. They represent alternative ways of interpreting racial, ethnic, and gender inequalities in the labor force.

The Effects of Secondary Vocational Education

Within recent years, numerous investigators have studied the impact of receiving a secondary vocatic hal education on indicators of labor market success. Comparisons of hourly earnings, labor force participation, and employment rate, to name a few economic outcomes, are made between youths who received some degree of vocational instruction in high school and others who followed either an academic or a general curriculum; some of the studies have differentiated among several of the special groups that are subjects of the present report. This body of literature provides a useful backdrop for the present study. In addition,



consideration is also given to data on variation among the special groups in enrollment patterns across specialty areas within secondary vocational education, because research suggests that area of specialization affects, to some degree, the labor market outcomes of vocational education graduates.

Enrollment Patterns of Special Groups

In the fall of 1979, approximately 15 percent of all secondary education vocational students were black, 4 percent were Hispanic, Asian-Americans and Native Americans each represented less than 1 percent, 0.7 percent were LEP students, and 2.5 percent were handicapped (Condition of Vocational Education 1981). Meyer (1981) examined the vocational education enrollment patterns of black, Hispanic, and white men and women who graduated from high school in 1972. He reported that black men and women, on average, took more vocational education courses than white men and women, and Hispanics took more courses than either of those two groups. Campbell, Orth, and Seitz (1981) reported, on the other hand, that Hispanic males were only slightly more likely to take vocational education courses at the secondary level than were black or white males. No differences were found in overall participation in vocational education among white, black, and Hispanic females. The findings of Campbell, Orth, and Seitz were based on analyses of transcripts and interview data from the 1979 and 1980 National Longitudinal Survey--New Youth (NLS-Youth).

Benson and Hoachlander (1981) examined the enrollment patterns of secondary vocational education students in 10 states by race/ethnicity (that is, blacks, Hispanics, Asian-Americans, and Native Americans) and gender. In addition, the study included data on the enrollment patterns of handicapped, disadvantaged, and LEP students. General findings of the study are as follows:

- Minority students, relative to their numbers in the larger student population, were underrepresented or proportionately represented in vocational education programs at the secondary level.
- o Females, relative to their numbers in secondary vocational education, were overrepresented in consumer and homemaking programs, whereas males dominated trade and industry programs as well as the agriculture programs in secondary vocational education.
- when vocational education programs were ranked in terms of employment opportunities and average expected wages, analysis of programs revealed that women were consistently concentrated in programs with a large number of job opportunities but with low wage expectations. A similar but considerably weaker pattern was observed for minority students enrolled in secondary vocational education.



Meyer (1981) also examined the vocational specialties of black, Hispanic, and white men and women who were 1972 high school graduates. Meyer reported that black men were more likely to take courses in agriculture than either Hispanic or white men. Hispanic men were more likely to take courses in trade and industry, industrial arts, distributive education, and health than black or white men. Only in commercial courses did proportionately more white men enroll than black or Hispanic men. With respect to the enro'lment patterns of women in specialty areas, proportionately more black women trok courses in trade and industry, and agriculture, than Hispanic or white women. Proportionately more Hispanic women took courses in business and office, home economics, industrial arts, distributive education, and health service areas.

Labor Market Outcomes Research

The evidence is mixed as to whether male vocationally educated high school graduates (especially white men) earn significantly more per hour or per week than otherwise similar nonvocational graduates. Grasso and Shea (1979) reported no significant effects on hourly exprings for white men in an analysis of data from the National Longitudinal Survey of Labor Market Experience (NLS-LME) data. Researchers using other longitudinal data have found similar results (Gustman and Steinmeier 1981; Mertens and Gardner 1981; Meyer 1981; Woods and Haney 1981; Rumberger and Daymont 1982; Campbell, Orth, and Seitz 1981; and Campbell et al. 1981).

The effect of secondary vocational education on hourly or weekly earnings for women is more consistently and significantly positive than for men Grasso and Shea (1979) found statistically significant, positive earnings effects for women who had training in commercial or business/office courses. In the Class of '72 and NLS-LME data sets, Meyer (1981), Gustman and Steinmeier (1981), and Mertens and Gardner (1981) similarly found significantly higher earnings (hourly and weekly) for women who took vocational courses in the business/office area. by Woods and Haney (1981) of Class of '72 data showed strongly positive effects of vocational education for white women and somewhat less significant (but always positive) effects for black In the recent study by Campbell and Basinger (1985), white female vocational graduates in training-related jobs earned more (but not substantially more) per hour and per month than otherwise similar white females in the general curriculum, but no such relationship was found for minority "men. In a previous study, Campbell et al. (1931) found strongly significant earnings advantages for women (especially minority women), and Rumberger and Day nont (1982) reported similar findings for the NLS Youth. The only apparent sources of disadvantage in earnings for women



were specialization in home economics (found in Meyer's study) and vocational courses not used on the current job (in Rumberger and Daymont [1982]).

The longer the period to which the earnings measure applies, the greater are any apparent advantages associated with secondary vocational training, either for men or women. Although advantages in weekly or hourly earnings for male vocational graduates are difficult to detect, both Conroy (1979) and Li (1981) reported advantages in annual labor income for men. Gustman and Steinmeier (1981) also found a significant advantage in annual earnings, but only for specialists in the trade and industry Meyer (1981) found that any hourly earnings advantages for women were magnified in weekly earnings and annual income by the greater number of hours per week and weeks per year that women vocational graduates worked. Rumberger and Daymont (1982) found that both men and women with significant vocational education worked significantly longer hours and were usually unemployed fewer weeks per year.

In examining the effects of vocational education on earnings, employment, and occupation, Gardner (1984) found that for all race (white and minority) and gender groups, vocational education graduates in training-related employment have higher earnings than otherwise comparable graduates of the academic and general curricula, and that the differentials are larger for males than for females. Gardner also found that concentration in secondary vocational education and working in training-related employment are associated with fewer years of education, but more months of labor market experience. In the study by Campbell and Basinger (1985), vocational education graduates holding jobs for which they were trained earned substantially more per hour and per month than otherwise similar general education graduates, but for other labor market outcomes such as labor force participation and employment stability, the results are less clear. ference between those in training-related employment and those who are not is a most striking finding. These data indicate the importance of training-related placement in generating earnings differentials and suggest that benefits from vocational education are attributable to occ pationally specific skills rather than to general work habits or attitudes.

There is little evidence generated by comprehensive national studies on the labor market effects of vocational education for handicapped persons. Evidence from two studies based on local samples suggests a positive relationship between work study or vocational training and the labor market experiences of handicapped persons (Dinger et al. 1973; Hasazi and Preskill 1982). Mertens and Seitz (1982), using data from NLS-Youth, examined the labor market effects of vocational education for handicapped persons. Although the sample size was small (73 respondents),



their findings suggested that handicapped vocational graduates had a higher rate of labor force participation, a higher employment rate, and a lower unemployment rate than otherwise similar handicapped nonvocational graduates.

There is ample documentation of the disadvantages in earnings and employability experienced by the handicapped (see Czajika 1984 for selected statistics). Bowe (1980) reported that 80 percent of the handicapped population earned less than \$7,000 per year. Levitan and Taggart (1976) reported that disabled males earned 20 percent less than nondisabled males. In addition, lower rates of advancement and lower salary increases were found for hearing-impaired persons as compared to others (Guilfoyle et al. 1973; Reich and Reich 1974). Regarding the employment rate of individuals with handicapping conditions, Buzzell and Martin (1978) reported a 39 percent unemployment rate for the handicapped; and Branch and Hodick (1976) reported a 64 percent unemployment rate for handicapped persons who were out of school for at least 6 months.

As for the labor market status of those with limited English proficiency, young people in this group in 1979 (in comparison to the 16- to 21-year-old-age group in general) had lower status jobs, a higher unemployment rate, and a lower labor force participation rate and employment/population ratio (Passmore et al. 1982). There are, however, a number of positive reports about the effectiveness of bilingual programs for this group (see, for example, Friedenberg and Bradley 1984).

In conclusion, the literature shows that many factors influence the labor market experience of youth. One factor, for example, that arrants further study is high school curriculum. The effect of high school curriculum on earnings or employment status is not straightforward. For secondary vocational education graduates in particular, the evidence presented heretofore indicates that striking differences in labor market status exist in association with membership in selected population "groups of pecial interest" and with vocational specialty. The remainder of this report will explore such differences in order to understand more fully the processes that influence the participation of secondary vocational graduates in the labor market.



CHAPTER 3

METHODOLOGY

Special Groups, Education, and the Labor Market

This study has three major interrelated objectives: to ascertain (1) the effect of membership in certain demographic subgroups of the population on the high school curriculum followed, (2) the effect of enrollment of these groups in the vocational education curriculum on the extent and character of their postsecondary education, and (3) the effect of vocational education in high school on subsequent labor market success. More specifically, we wish to ascertain whether the effects of high school vocational education programs differ according to socioeconomic status (SES), race or ethnicity, handicapping condition, or gender. The study is organized around several questions. First among them are these:

o What kinds of vocational education experience have the various groups of special interest had? Are students sorted, by prejudice, into specialties on the basis of ethnic origin, gender, handicapping, or other conditions?

A second question addresses primarily the postsecondary educational experience of these groups, with emphasis upon secondary vocational educational experience. It repeats, in part, some of the authors' earlier work, but with a new database and with an additional year of experience out of high school. The question is:

o What is the role of secondary vocational education as an antecedent of successful participation in technical school, community college, 4-year college or university?

The third set of questions addresses primarily the labor mar et outcomes of secondary vocational education for the groups of concern in this study, with emphasis on the potential for differences among them. They are:

- What are the labor market oucomes by gender
 - -for Hispanics?
 - -for blacks?
 - -for Native Americans?
 - -for those with limited English proficiency?
 - -for low SES respondents?
 - -for the handicapped?
- o What are the labor market outcomes for women as a group?



Longitudinal Databases

The data used for analysis in this study were taken from two (1) the National Longitudinal Sarvey of Labor Market Experience-New Youth Cohort (NLS Youth), with the high school transcripts of a subsample of the NLS Youth, and (2) the High School and Beyond (HS&B) longitudinal survey, with a subsample of high school transcripts from the HS&B panel. The Center for Human Resource Research (CHRR), with support from the U.S. Departments of Labor and Defense, initiated the NLS Youth data collection in 1979. The HS&B was the second longitudinal survey supported by the National Center for Education Statistics (NCES). It was designed to build upon the National Longitudinal Survey of the High School Class of 1972 (Class of '72). These two databases provide a broad and unique information base to examine the course-taking behavior of secondary students and to better evaluate life-cycle factors of post-high school youths.

NLS Youth

The 12,686 youths included in the NLS Youth sample were selected by a household screening process in the fall of 1978; the New Youth Cohort is a National probability sample of youth who were between the ages of 14 and 21 when originally selected. The sample was drawn in three stages: (1) a nationally representative sample; (2) a supplemental sample of blacks, Hispanics, and economically disadvantaged whites; and (3) a sample of young persons serving in the military (this sample was not used in the present study). Both the cross-sectional and supplemental samples were stratified by sex to obtain relatively equal proportions of men and women. Because Hispanics, blacks, and economically disadvantaged whites are purposefully overrepresented in the NLS Youth sample, a weighting procedure was developed to permit more accurate estimates for the whole youth population by taking these oversamplings into account.*

Extensive background information about family, schooling, work history, and training was gathered for all the respondents in the NLS-Youth survey when they were first interviewed in early 1979. In addition, data on current educational and labor market activities were obtained. Follow-up interviews with the participants of the NLS-Youth have been conducted annually through 1984, and may be continued for several years to come.



^{*}For a full description of the sampling and weighting procedures used in the survey and a descriptive analysis of the first year's data, see Borus et al. (1980).

The Transcript Collection effort was initiated through a subcentract let by the National Center for Research in Vocational Education to the National Opinion Research Center (NORC) to secure and code the transcripts of the NLS Youth respondents. Transcripts were collected in 1980 for members of the sample who were 17 years or older at the 1979 NLS interview, and again in 1983 for the youngest members of the cohort. Respondents excluded from the collection effort were those in the military sample and those who attended foreign high schools. If a student had transferred and the original transcript was incomplete, extensive efforts were made to locate and contact the new school to obtain the student's records.

If available, the coded information from the individual transcripts included: (1) days absent, grades 9 through 12; (2) academic rank in class; and (3) test scores for mathematics and verbal aptitude—Preliminary Scholastic Aptitude Test, Scholastic Aptitude Test, and American College Test. Course information included the specific course taken, the grade or year in which the course was taken, the letter grade, and the credit received for the course.

At the time of the coding, each course credit was converted to a common scale, the Carnegie credit unit. This system assigns l credit to a standard full-year course, or one course taken one hour a day for 180 days. The Carnegie credit unit system provides a method that is sensitive to the length of time spent in the classroom (in contrast to a simple count of courses taken), thus standardizing for variations among courses in time and across schools.

A coding system to identify the actual courses taken by the student was developed from the Standard Terminology for Curriculum and Instruction in Local and State School Systems Handbook VI (Putnam and Chismore 1970). The course identification scheme consisted of a two-digit code that specifies the individual course within the general category (for example, Math I, American Literature).

Data for the analyses in the present study were taken from the 1979-83 surveys. All subsamples used in this study were selected so that they contain only high school graduates.

High School and Beyond

The HS&B database funded by NCES was designed to build upon the NLS-72 database to give a broader range of life-cycle factors, such as family-formation behavior, intellectual development, and social participation. The base year survey was initiated in the spring of 1980 with 30,000 sophomores and 28,000



seniors enrolled in 1,015 public and private schools. The secondary schools were selected in the first stage of sampling. In the second stage, 36 seniors and 36 sophomores were randomly selected within each school (in schools with fewer than 36 seniors or sophomores, all eligible students were included).

To allow for studies of certain types of schools cr students, the highly stratified National probability sample oversampled Hispanics, Catholic schools with high proportions of black students, and public alternative schools with high-achieving students. The Hispanic supplement to the sample was funded jointly by the Office of Bilingual Education and Minority Languages Affairs, and the Office for Civil Rights within the Department of Education. The base year survey included a sample of students from the Department of Defense Dependents Schools (DODDS). However, these students are not a part of the HS&B national probability sample and were not weighted.

The base year questionnaire included information on the students' high school experiences, work experiences, personal and family background, attitudes, and plans for the future. Information was also obtained from administrators about school characteristics, from teachers about their evaluations of students participating in the sample, and from a subset of parents about financing of higher education.

The first HS&B follow-up sample in 1982 consisted of 30,000 1980 sophomores and 12,000 1980 seniors. Although the follow-up sample is reduced in size from the base year sample, all base year students were included in the universe from which the follow-up sample was selected; therefore, it is representative, with suitable weighting, of the base year group. The second follow-up of this sample was completed in 1984.

The High School and Beyond Transcripts Collection effort was initiated by the NCES under contract with the NORC to code transcripts of the 1980 sophomore cohort. It was not feasible within the resources of the survey to attempt to collect the high school transcripts of all of the respondents in the first follow-up sample. Therefore, a further subsample was drawn from that group for transcript collection. The transcripts were collected in the fall of 1982; the target sample consisted of 18,427 of the 30,000 1980 sophomores included in the first follow-up. This sample, as drawn, maximizes the subgroup sizes for such strata as dropouts, students in private schools, selected minority groups, and students whose parents were surveyed in the base year. High school transcripts could not be obtained for every case in the sample. The weighting procedures devised took this into account as well as the sampling specifications of the original sample.



The student transcripts contain information for each secondary-level course taken. Each course includes a six-digit course identification number, the year and term the course was taken, the credits earned, and the final grade. Courses that are a part of special curricula or programs (for example, bilingual education, special education, programs for gifted students; are so identified. In addition, each record includes information on the student's rank in class, overall grade point average, number of days absent, number of days of suspension, the date and reason the student left school, and identifying codes and scores for standardized tests.

Summary of Data Quality

The HS&B and NLS Youth surveys were not specifically designed for this study. Thus it was not always possible to identify members of all the groups of special interest in both databases (for example, handicapped, limited English proficient). As the descriptive information and the analyses were developed, direct comparability between the two databases could not always be maintained. If data were unavailable on a variable, that variable was omitted from the specification. Missing entries in many of the tables reflect this problem. Because transcripts were available only for HS&B sophomores, analyses of this database were confined to the sophomore cohort. However, these two surveys provide a substantial bo _ _f information for analysis. Both provide individual transcripts including information on courses taken, credit earned, and letter grades received. extensive background information about family, work history and attitudes, schooling, and vocational and government training is In particular, the availability of ability measures, information on attitudes toward school and work, and aspirations, as well as other characteristics permit better control for potential selectivity bias than has been previously possible. Thus, these databases represent the best national sets available to consider the problems under study.

The Conceptual Schema

The questions around which this study is organized grow out of a conceptual framework that is depicted in figure 1. The figure represents a temporal ordering of the potential influences, but does not attempt to illustrate the subtleties of a formal causal model. Rather, it serves to suggest the kinds of variables that should be represented in an analysis of the joint effects of high school curriculum and membership in the various groups of special interest on postsecondary education and labor market outcomes. It also suggests the complexities of some of the relationships that are posited in the framework. Ways of dealing with these are discussed in a later section on special problems.



Figure 1. Conceptual schema



The factors associated with selection of high school curriculum are explored through both cross tabulations and regression The cross tabulations relate the groups of special interest to high school curriculum and, for those who pursued a vocational curriculum, the specialty in which they earned most of their credits. High school curriculum is classified on the basis of analyses of transcripts into categories developed by Campbell, Orth, and Seitz (1981) that include a variety of patterns of participation in vocational education, as well as pursuit of the academic and general curricula. Individuals for whom transcript data were not available were classified according to selfreported curriculum. These descriptive tables permit one to see the simple relationship between membership in a special group and the likelihood of several patterns of vocational preparation in To ascertain however, the influence of special high school. group membership on high school vocational preparation, it is necessary to control for other variables (for example, low SES, region) that are believed to be related to both group membership and high school curriculum. These controls were introduced through probit analyses that estimated the likelihood of completing a vocational curriculum versus all others or an academic curriculum versus all others. The probit analysis was selected because it is a maximum likelihood technique for dichotomous Such an approach is not entirely satisfacdependent variables. tory. Ideally, one should evaluate the conditional probability of any of the three choices, (the general curriculum is the third) given the independent information available about the candidates. The probit technique is generalizable to such a variable, but as Judge et al. (1980) point out, not enough empirical work has been done using this technique to evaluate its properties, and the resources of this project did not permit development of the necessary computer routines. The procedure followed was probably the best available under the circumstances.

The second set of questions, relating to the determinants of postsecondary education, was approached by means of a multivariate analysis similar to that described for high school curriculum choice. In this case, however, the difference between no postsecondary education and a 4-year college program was judged to be too great to permit combining them into a single group for comparison with the choice of vocational-technical school or 2-year community college. Therefore, the analysis was conducted sequentially in several stages. The first equations were run to estimate the contribution of special interest group membership, high school vocational education, eighth grade aspirations, and other control variables to the probability of enrolling in any formal postsecordary education (vocationaltechnical, 2-year, 4-year). The entire sample is appropriate for this analysis. The second equations, limited to those individuals who had enrolled in some form of postsecondary schooling, identified the factors leading to the choice of vocationaltechnical school as opposed to the other forms of postsecondary



education. The third set of equations estimated the contribution of the groups of special interest, the control variables, and high school vocational education to the probability of choosing a 4-year rather than a 2-year college. Both vocational-technical enrollees and those not enrolled at all were excluded from this last sample.

The third set of questions, concerning labor market outcomes, was also addressed by multiple regression techniques. The dependent variables in these regressions were four indicators of labor market success: (1) percentage of weeks since the last high school year in which the respondent had been working or looking for work; (2) percentage of weeks in the labor force that the respondent had been employed; (3) hourly wages; and (4) monthly earnings.

All equations were run for both the NLS Youth and the HS&B data. For the latter, a larger number of control variables were available, such as school climate and individual behavior (discipline, absenteeism).

All multivariate analyses began with the fitting of an ordinary least squares (OLS) equation. Where appropriate, this was followed by an evaluation of the relationships through techniques discussed in a later section of this chapter including maximum likelihood techniques such as probit.

The general form of the OLS equations was as follows:

$$Y = a + b_{1-n}X_{1-n} + c_{1-n}G_{1-n} + d_{1-n}HC_{1-n} + f_{1-n}PS_{1-n} + k_{1-n}Z_{1-n} + \epsilon$$

where X = a vector of control variables

G = a vector defining membership in special groups

HC = a vector of high school curricula

PS = a vector describing nature and extent of
 postsecondary education

Z = a vector of variables included to account for interaction effects; that is, for the possibility that the effect of postsecondary education on hourly earnings might differ between vocational education high school graduates and other high school graduates.

 ε = error term

The variables in the Z vector are not necessarily implied by the model shown in figure 1, although the need for such variables is suggested by that framework. Because some of the Z variables were not available in both databases, cross-validation was not always possible.



The Variables

The general form of the analyses has been presented, providing background for specific consideration of the variables. A complete listing is provided in appendix A.

The Dependent Variables

These variables have been introduced in earlier discussion, but are repeated here in the interest of completeness. They are as follows:

- o High school curriculum
- o Postsecondary education
- o Labor market outcomes
 - --Labor force participation
 - --Employment
 - --Hourly wages
 - --Monthly earnings

Principal Explanatory Variables

To explore the effects of secondary vocational education and to ascertain whether these differ among selected subsets of the population requires a set of variables representing high school curriculum. It also requires a set representing the special groups.

High school curriculum. The high school curriculum variables are described in detail in the work that reports their development (Campbell, Orth, and Seitz 1981). Briefly reviewed here, these variables consist of vocational education (five categories), the academic curriculum, and the general curriculum. The categories of vocational participation were designated Concentrators, Limited Concentrators, Concentrator/Explorers, Explorers, and Incidental/Personals.* The Concentrators averaged six or more Carnegie credits in one specialty area, followed the specialty throughout most of the high school years, and continued in it up to graduation. The Limited Concentrators averaged somewhat more than three credits, and were less likely to follow a specialty through the senior year. The Concentrator/Explorers averaged two and one-half credits, usually ending specialization before the senior year. Students in the two remaining categories either did not specialize by having a major ty of credits in any field, or had only one or less credits in a specialty.



^{*}It is possible to develop each of these patterns in vocational, area vocational, and comprehensive high schools. See Bragg et al. 1986.

The academic category was assigned to those students who had completed three or more credits of English, three or more credits of math, two credits each of science and social studies. If a student had completed two or more credits in a foreign language, the math requirement was dropped to two credits. The general curriculum was assigned to all students who were not classifiable into one of the other categories. The Explorers and the Incidental/Personals do not have a significant in estment in marketable vocational skills. Therefore, they were reclassified as academic or general, for whichever they qualified, for the regression analyses.

This set of categories was used in the regression equations with one further refinement. It has been established that vocational course work shows its significant labor market effects when the vocational graduate works in a training-related job (Campbell and Basinger 1985; Gardner 1984). Therefore respondents in the vocational groups were further subdivided into those who were in such jobs and those who were not. One further problem needed to be addressed to make maximum use of the data and to preserve, as far as possible, its generalizability. Transcripts were not available for all respondents in either database. There were, however, self-report data available that permitted a more gross classification than the transcripts provided. Although preliminary tabular analysis had documented that self-report curriculum data were only marginally reliable, (self-report does not coincide with courses shown on the transcript) categories based on these data were used for those for whom transcript classification was not possible.

Thus, the high school curriculum variable used in the regressions includes 10 categories. They are Concentrators, Limited Concentrators, Concentrator/Explorers, Concentrators in training-related jobs, Limited Concentrators in training-related jobs, Concentrator/Explorers in training-related jobs, the academic curriculum, self-report academic curriculum, self-report vocational curriculum, and the general curriculum. For all regressions the omitted reference group consists of those in the general curriculum. All of the other categories are coded in dummy variable form, with the value one indicating membership in the category and zero otherwise.

Special groups. The subsets of the population whose postsecondary education and labor market experience are differentiated in the analyses are based upon gender, ethnicity, physical
condition, and language proficiency. More specifically, using
white males as the reference group, the most general regressions
include a set of dummy variables for (1) white females, (2)
blacks, (3) Hispanics, (4) Native Americans, and (5) other. Each
of these groups (except, of course, the white females) is further
differentiated by gender. In addition to these gender/ethnicity
categories, there are two dummy variables representing (1) the
existence of a physical handicap (1 = handicapped, 0 = otherwise)



and (2) a limited ability to speak English (\hat{i} = limited English, 0 = otherwise).

This specification, it will be noted, implicitly assumes that the effects on educational and labor market outcomes of physical and/or English language limitations and of membership in a particular ethnic group are additive—that is, that a physical disability, for example, has the same effect on respondents in every gender/ethnicity category. Even more importantly such a specification assumes that the effects of high school curriculum and of special group membership are additive—for example, the pursuit of vocational education in the high school has the same effect for Hispanics as for whites.

In orde, to avoid this assumption, or at least be core gant of its potential effect, and to permit exploration of interactions between high school curriculum and special group membership (as well as interactions among special group characteristics), a separate equation has been run for each special group for which there are sufficient cases to make interpretation meaningful (Hispanics, blacks, women, and low-SES respondents). In these equations the only special group variables are the handicap and limited-English variables in all the equations, plus the race/ethnicity and gender variables in the equation for the low SES group, the race/ethnicity variable in the equation for women, and the gender variable in the equation for Hispanics and blacks.

Control Variables

In specifying the models represented by the OLS equation, the most basic problem is the need to avoid biased results by including all those variables that may be correlated with the dependent variable and the explanatory variable of central concern—in this case, participation in secondary vocational education. Before describing these control variables, it is well to elaborate the nature of the problem and to emphasize the advantage of the NLS—Youth and hS&B databases in meeting it.

It is well known that there are significant differences among the students in the several secondary school curricula. Students who enroll in the vocational curriculum, for example, on average come from lower socioeconomic strata of the population and do less well on scholastic aptitude tests than those who follow the other curricula. These same characteristics are, of course, influences on both the nature and extent of postsecondary education and on success in the labor market. If one is interested in ascertaining the independent influence of the high school corriculum on subsequent educational or labor market experience, one must control for such characteristics.

It is important to note that the factors that increase the likelihood of enrollment in vocational education tend to be negatively related both to the extent of further education and to success in the labor market. Hence, failure to control fully for such factors would have the effect of concealing or understating whatever positive effect vocational education might have on these outcomes. Putting this another way, whatever bias results from inadequate controls operates in favor of finding no beneficial results of vocational education. It follows that any positive effects that are detected are conservative estimates of the true impact of the programs.

Fortunately, the richness of the HS&B and NI-S-Youth database permits one to be reasonably confident that the problem of selectivity bias has been adequately met. The control variables that are used in the analyses and the reasons for their inclusion are detailed next.

Ability. As previously mentioned, there is a clear association between ability scores and curriculum, and the evidence of an association between wages and ability makes it necessary to include a control for this variable to avoid the bias that would exist in the simple relationship between curriculum and measures of labor market success, especially wages. The measures of ability differ between the NLS Youth and HS&B. In the former it is the Armed Forces Qualification Test (AFQT), and in the latter it is a composite score on verbal and math aptitude tests developed for the survey.

Socioeconomic status. The low SES group is one of the special interest groups in the analysis. However, for all of the other groups, SES serves as a control. At age 14, or when sophomores, simple frequency counts indicate that more vocational students fall in lower SES quartiles than their proportions in the population would suggest. Status attainment theory suggests that SES may influence wages in addition to educational solectivity.

Work importance. Although there is not an established theoretical base, it is intuitively legical that a positive attitude toward work and expressed orientation toward work might be associated with a greater likelihood of selecting a vocational curriculum. Items dealing with this concept are available in HS.B, and are included in the regression equations.

School attitude. More positive attitudes toward schooling might also suggest a curriculum choice that is more likely to lead to further schooling than the vocational curriculum. Items relating to this concept are also available in both databases, although they are more complete in HS&B, and are used as controls for curriculum selectivity.



Postsecondary education. The well-established positive relationship between earnings and postsecondary education requires that this be controlled unless the population is restricted to only those who do not go on to further schooling. Because the majority of high school graduates do go on, such a restriction would introduce a serious problem of selectivity bias, and sample generalizability. Controls for years completed and current enrollment are included in equations where a labor market outcome is the dependent variable.

Region. This variable serves as a proxy for differing labor market conditions (for example, growth or decline, industry mix). There are regional patterns in vocational participation as well. The regions are Northeast, North Central, South, and West. North Central is the reference region.

Rural, urban, suburban. This variable is included because there is evidence that wage rates are likely to be lower in rural areas than in suburban or urban areas, and because vocational education appears to be more popular in rural areas.

Labor market experience. This is the proportion of available weeks from the approximate time of high school graduation to the respondent has spent in the labor force. This variable reflects the expected increase in wages as a function of higher productivity or of the employer's expectation of higher productivity. Persons selecting a vocational curriculum might be expected to start labor force participation earlier, and therefore have a longer period of time on the job at the time of the survey. This factor, incidentally, is a notable exception to the generalization made on page 28 that is, failure to include it as a control variable would tend to overstate a positive effect of the vocational curriculum on earnings.

Hours worked per week. Because graduates of the high school vocational education curriculum a have lower probability of long-term postsecondary education as compared with students in the other two curricula, they are more likely to hold full-time jobs in the immediate years after graduation, when the labor market success variables were measured. The variable is therefore included in regressions where hourly earnings is the dependent variable.

Occupations. Several categories of occupations were included as dichotomous variables in wage and earnings equations. Secondary vocational education trains only for certain occupations equations. These in turn have characteristic wage patterns that do not represent the full scale of wages available to workers.

Further Specification Problems

A recurring difficulty with analyses of the type undertaken in this study is sample bias. This problem was partially



addressed by the selection of control variables, but persistent difficulties remain. In trying to estimate the effects of the high school curricula, there are at least four distinct but related problems that might arise.* Two of them are "sample selection" problems. The other two concern unobserved, or latent, variables. The first problem arises if the sample to which the analysis applies is restricted in some way so that it is no longer representative of the population to which the results are to be inferred. For example, if only those respondents who have not completed a 2- or 4-year college program and are not enrolled are included in the analysis, the earnings potential of some people will not be accounted for in the equation. This potential is most likely systematically associated with the dependent variable that, in this study, is wages or earnings.

A second problem of sample selection occurs if the sample is systematically divided on the basis of the curriculum followed. Although it is possible to deal with the first pair of these problems by estimating the likelihood of being in one or another of the three curriculum tracks (using 2-stage least squares or one of the Heckman [1976, 1978, 1979] procedures), there are other approaches that sidestep these issues and reduce the semple selection bias potential of the specification. The approach taken was to retain the sample as intact as possible and to control for the differential characteristics of the groups by including variables showing the completion level of postsecondary education, whether or not the respondent was currently enrolled, and, in the hourly rate of pay equations, the number of hours worked.

The remaining two problems differ because they grow out of the presence of one latent variable among many in the first case, and a single latent variable in the second. In either case the presence of a latent variable (by definition unmeasured) that correlates both with the dependent variable (for example, hourly rate of pay) and the curriculum selection results in a correlation between the error term and the dependent variable, which then results in a bias of the coefficient for curriculum.

If one is willing to assume that a single latent variable exists that correlates with curriculum selection and earnings or wages, it is possible to utilize one of the leckman procedures to correct for such a bias. However, such an assumption does not seem realistic. There are probably many influences that are

^{*}The discussion that follows depends heavily upon comments on these issues by our former colleague, John A. Gardner, who is now an economist with the Workers' Compensation Institute. We are interpreting his remarks, however, and any errors in the discussion are ours, not his.



unmeasured and unobserved. Two that seem likely are ability and A promising approach to dealing with such latent motivation. variables and the bias they may contribute is the LISREL technique (Joreskog and Sorbom 1983; Long 1983). In the present application, however, the estimation of the latent variables from the available proxies would require the assumption that a linear prediction of a dichotomous variable was appropriate. this assumption is more realistic than a more readily available alternative assumption is not known. That assumption is that the available proxies for ability and motivation are adequate measures of those variables. The proxies are test scores as measures of ability, and attitude toward work, education, and locus of control for motivation. In this study the assumption of adequate measurement was accepted, although if resources become sufficient, an analysis using the LISREL technique is planned in the future. The additional variables that were utilized as the proxies were described previously. It should be noted that the most adequate set is available only in HS&B, and that a complete analysis using these variables, as provided by HS&B, has not been previously available.

Summary

The analytical strategy is summarized in figure 2 and table Figure 2 shows the structure of the high school curriculum variable and of the four variables representing membership in "special groups"--race/ethnicity/gender, low socioeconomic status, handicap status, and limited English proficiency. of explanation is required for each of these. The high school curriculum patterns are based largely on an analysis of transcripts, and the categories are described in appendix A. transcript data did not exist, or did not permit classification, the student's self-reported curriculum was used. Separate categories for self-reported academic and vocational curricula The self-reported general curriculum is combined are retained. with the corresponding category based on transcript data and constitutes the reference group in the regressions.

The several criteria for categorizing special groups obviously do not necessarily result in mutually exclusive categories. That is, a person may be both a Hispanic and disabled; an Asian may have an English language limitation and be in the low SES quartile of the population. Thus, when all the special group variables are included in the same regression, the implicit assumption is that the effect of membership in each of them is additive—that is, being disabled has the same effect on a white male as on a Hispanic female. Where the number of sample cases is sufficiently large, interactions among these variables are explored by means of stratification. For example, in the earnings regressions, there are separate equations for white



- I. <u>High school curriculum</u> (Reference group = general curriculum)
 - A. Concentrator^a
 In training-related job
 Not in training-related job
 - B. Limited concentrator^a
 In training-related job
 Not in training-related job
 - C. Concentrator/explorera
 In training-related job
 Not in training-related job
 - D. Academic
 - E. Self-reported vocational b
 - F. Self-reported academicb

II. Special group membership

A. Ethnicity and gender (reference group = whites and/or males)^C

white females

Hispanic Males Females

Native American Males Females

Black Males Females

Other Males Females

- B. Socioeconomic status
- C. Handicap status (reference group = no handicap)
- D. Limited English proficiency (reference group = no limitation)

Figure 2. Structure of principal explanatory variables



^aWhere hourly rate of payor monthly earnings is the dependent variable, the three transcript—based vocational patterns are divided into two groups: respondents who are in jobs related to their vocational training and those who are not.

 $b_{\text{Where transcript}}$ data are unavailable, respondents are classified on the basis of self-reported curriculum.

 $^{^{\}rm C}$ Reference group is white males in all-respondent regressions; whites in all-female regressions; males in ethnic minority regressions.

dSocioeconomic status is included in all regressions as a control variable. In addition, the earnings regressions have been run for workers in the lowest SES quartile.

TABLE 1
SUMMARY OF MODEL SPECIFICATIONS, BY DEPENDENT VARIABLE

			<u>Dependent</u>	Variable		
Independent Variable	High School Curriculum	Post— Secondary Education	Labor Force Participation	Employment	Hourly Earnings	Monthly Earning:
Principal Explanatory Variables						
High school curriculum		.,				
Race/ethnicity	v	X	X	X	X	X
Gender '	X	X	X	X	X	X
Handicap status (HS&B only)	X	X	X	X	X	x
Limited English proficiency	X	X	X	X	x	â
·	X	X	X	â	ŵ	â
ontrol Variables						^
Soc loeconomic status	v					
Region (reference group = North Central)	X	X	X	X	X	X
Rural residence (reference group = urban/suburban)	X	X	X	X	X	x
Ability/achievament (AFQT)	X	X	X	x	x	â
Post secondary education (reference group = none)	X	X	X	â	â	x
Current enrollment status (1 = yes)				^	^	^
Number of years completed			X	X	x	v
labor marks toward and form			X	x	â	X
Labor market experience (weeks worked)				^	â	X
Tenure in current (or most recent) jou					â	X
Occupation (HS&B only)						X
Ever married? (1 * yes) (HS&B only)			X	v	X	X
Any children? (1 = yes) (HS&B only)			â	X	X	×
Self-este am	X	X	â	X	X	X
Locus of control (HS&B only)		^		X	X	X
High school experience			X	X	X	X
Extent of absenteeism (HS&B only)	X	v				
Disciplinary problems (1 = was) (HSTR only)	â	X X	X	X	X	X
IFOUD 18 WITH (8 W (1 = Wes) (HSER Only)	â		X	X	X	X
Work in high school (1 = was) (HS&R only)	â	X	X	X	X	X
10th-grade point hour average		X	X	X	X	X
High school attitudes and plans	X	X	X	X	X	X
Work orientation composite (HS&B only)					^	^
Enjoys work more than school (HS&Bonly)		X	X	X	X	X
Luck more important than work (HS&B only)	X	X	X	X	â	x
Work more important than school (HS&B only)	X	X	X	x	x	â
Plans to work year after graduation (HS&B only)	X	X	X	â	â	â
8th-orage aspirations (1 m as to sellers)	X	X	X	X	â	â
8th-grade aspirations (1 = go to college) (HS&B only) Work at 35? (1 = yes) (NLS only)		X	X	â	â	x
Evaluation of school (NLS only)	X	X		^	^	^
Transport of Scinot (MLS ON 19)	X	X				



males, white females, Hispanics, blacks, and low SES workers. In all of these, handicap status and English language limitations are retained as explanatory variables.

Table 1 shows the variables that are used to "explain" each of the major dependent variables in the analysis. In order to avoid cumbersome detail, the most general form of each regression is indicated. For example, although the x's in the table indicate the inclusion of gender and race/ethnicity in the hourly rate of pay regression, these variables would obviously not appear in the stratified regression for white females. Moreover, in some cases a regression was run in two ways--both with and without a particular variable; in such cases, the table depicts the inclusion of the variable.

CHAPTER 4

RESULTS

This chapter presents the results of the statistical analysis designed to answer the research questions set forth in chapter 1. Descriptive tables are discussed first, characterizing the total population after the initial screening process (for example, removing dropouts, the military sample, invalid date). It should be noted that the population used in the analysis consists only of those individuals who are high school graduates and attended public schools. To assess the effect of these exclusions, comparison tables are provided in appendix B. tables show both the original and screened samples crosstabulated by race/ethnicity, gender, and socioeconomic status. A comparison of the percentages in each cell permits ar assessment of the degree to which generalizability has been reduced by the required screens. Because the comparison relates to two samples rather than to their respective populations, the appendix tables are unweighted. The actual sample sizes are also provided in each table in the text.

Following a brief presentation of the descriptive material, the major portion of the chapter will present the results of multivariate analyses of the determinants of (1) high school curriculum, (2) the extent of postsecondary education, and (3) variation in several measures of labor market success.

Descriptive Tables

The descriptive tables present cross-tabulations of high school curriculum pattern and specialty areas for those individuals in the vocational curriculum by race/ethnicity and gender (tables 2-4) and by socioeconomic status (tables 5-6). Also, the percentage of the sample who are handicapped* (identified in the HS&B data only) and the percentage who are limited in their English proficiency (LEP)* are tabulated by race/ethnicity, gender, and SES (table 7) and by high school curriculum and vocational specialty (table 8) for comparison purposes.

The high percentages of Incidental Personals in all racial groups (tables 2 and 3) indicate that a large percentage of the respondents take at least one vocational course. Majority white men in both databas_s are most likely to pursue the academic curriculum, whereas Hispanic and Native American women are least likely to do so.



^{*}For complete definitions of "handicapped" and "limited English proficiency", refer to appendix A.

TABLE 2

CURRICULUM PATTERN BY RACE/ETHNICITY AND GENDER
FOR ALL RESPONDENTS

Percentage Distributions

HS&B

	To	tal_	Wh	ite	В1	ac k	нізр	anic	Native	American	As	<u>i an</u>	<u>011</u>	ier
Curriculum Pattern	n	\$	Male	Female	Maie	Female	Male	Female	Male	Female	Male	Female	Male	Female
Concen trator	1490	9.56	8.76	9.97	7.53	9.39	11.12	10.87	20.78	7.06	5.23	3.27	18.20	22.92
Limited Concentrator	2038	12•74	13.73	10.52	14.09	14.27	16.92	12.57	23.27	12.09	17.32	15.54	8.13	9.26
Concentrator/Explorer	1343	8.11	6.70	8.47	1 0.29	8.63	8.19	10.02	7.65	19.54	19.08	12.19	10.77	6.94
Explorer	1127	6-85	5.94	7•01	5.08	7.63	8.17	9.67	13.14	11.65	5.43	10-18	6.39	16.33
Incidental Personal	3239	20.07	19.25	20.55	20.61	20.00	18.65	19.77	15.60	22.52	32.55	35•13	24.01	33.35
Vocational Self-Report	6766	21.72	23.61	22.77	18.26	19.09	17.97	18.93	13.23	18.87	5.54	5.33	6.78	3.51
Academic	114	0.77	1.21	0.67	0.59	0.08	0.31	0.10	0.78	0.00	1.53	1.40	0.00	0.00
Academic Self-Report	1629	5.26	6.44	5.54	4.41	4.89	1.94	1.82	0.91	0.00	4-17	3.82	1.57	1.84
General	316	1.92	1.72	1.54	2.48	2.09	2.77	2.74	0-82	0.54	3.75	2•29	18.66	0.00
General Self-Report	4225	13.01	12.65	12.97	16.75	13.94	13.96	13.51	3.82	7•75	5.40	10-84	5.50	5.85
Total		100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Total n Total Row Percent	22287	100.00	7325 36.38	7599 37 . 90	1294 5•23	1580 6•46	1994 6•19	1787 5•01	119 0•53	104 0•37	177 0•56	174 0•49	82 0•55	

NOTE: Percentages are weighted; numbers are unweighted.



TABLE 3

CURRICULUM PATTERN BY RACE/ETHNICITY AND GENDER

FOR ALL RESPONDENTS

Percentage Distributions

NLC

	1	otal	<u> </u>	th! te	<u>e</u>	Black	<u> H</u> ls	panic	Nativ	e American) (<u>)ther</u>
Curriculum Pattern	n	*	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Concen trator	599	9.08	7.17	12.08	7.48	7.13	3.92	10.26	12.57	9.46	4.90	10.73
Limited Concentrator	1100	13.81	12.43	15.85	1 0.94	15.39	10.02	15.24	19.22	24.60	7.68	11.68
Concentrator/Explorer	636	7.73	5.62	9.44	5.19	8.89	4.79	8.86	7.17	14.21	6.33	9.60
Explorer	137	1.68	2.14	1.35	0.97	1.75	2.55	0.98	2.23	3.38	1.67	0.90
incidental Personal	20 72	28.17	31.40	27.89	23.43	20.84	28.47	24.14	21.82	18.27	30.28	30-35
Vocational Self-Report	36ó	3.99	3.47	3.72	6.01	6.17	4.47	6.91	4.74	4.52	3.49	2.83
Ac adem (c	384	5.99	8.12	5.22	4.33	3.59	5.93	2.56	8.92	1.74	8.20	3 . 55
Academic Self-Report	691	8.08	7.91	6.99	11.12	11.75	8.83	7.60	2.43	3.66	10.21	9.57
General	1609	19.13	20.26	15.01	27.76	21.08	27.39	19.32	18.26	18.86	24.59	17.50
General Self-Report	191	2.03	1.47	2.03	2.41	3.03	2.79	3.70	1.50	1.03	2.25	2.79
Unclass: flable	30	0.30	0.02	0.43	0.36	0.40	0.87	0.42	1.14	0.27	0.40	0.30
Total		100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Total n Total Row Percent	7915	100-00	1805 31.71	2037 33•32	849 5•26	1048 6•51	482 2.26	593 2•89	129 1•94	1 71 2.66	388 6.79	413 6•68

NOTE: Percentages are weighted; numbers are unweighted.



Native Americans in both NLS-Youth and HS&B are the most likely to be in the vocational curriculum, but because sample sizes for Native Americans, Asians, and Others are small, no definite conclusions can be drawn. Vocational participation on the whole is higher in the HS&B database than in the NLS-Youth. This may be due in part to the 5-year average age difference of the two samples (NLS-Youth being the older), reflecting a trend in the last 5 years toward more participation in vocational education. However, further study will be required before definite conclusions can be reached on this issue.

Vocational curriculum respondents alone are presented in table 4 which shows how racial/ethnic groups are distributed across vocational specialties. Business and Trade and Industry specialties have higher participation rates than any other vocational specialty. Within these two areas women cluster more in Business and men cluster more in Trade and Industry. Because of small sample sizes, it is difficult to draw any definite conclusions about the other specialty areas.

Table 5 presents the relationship between respondents' socioeconomic status and their curriculum pattern. On the basis of the highest and lowest quartiles, the high SES respondents are twice as likely as those in the low SES group to be in the academic curriculum and only half as likely to be in the vocational curriculum. There is not much difference between the two groups in the proportion pursuing the general curriculum.

The relationship between SES and vocational specialties is shown in table 6. Business appears to attract larger proportions of high than low SES students whereas the opposite is true of Trade and Industry. These tendencies are sharper in the NLS-Youth than in the HS&B data.

Table 7 shows the percentage of each population group that reports having a handicap (11.6 percent overall in HS&B) and the percentage who are limited in their English proficiency (1.38 percent overall in HS&B and 3.64 percent overall in NLS-Youth).

Hispanics and Native Americans have the highest percentages of handicapped respondents. As would be expected, Asians and Hispanics have the highest proportions of LEP respondents. The incidence both of handicaps and of limited Enlgish proficiency is inversely related to socioeconomic status.

In relation to curriculum pattern (table 8), proportionately twice as many students in the general curriculum as those in the academic curriculum report handicaps, while the proportions of vocational students with handicaps falls between these two extremes. Among the vocational specialties the differences are much smaller, although handicapped students appear somewhat less frequently in the Business and Distributive Education specialties than in the others.

SPECIALTY BY RACE/ETHNICITY AND GENDER
FOR VOCATIONAL RESPONDENTS
Percentage Distributions

Specialty	n <u>T</u>	otal		White .		3 lac k	HI	spanic	Nativ	e Americ	, A.	stan .		th r
			Male 	Female	Male 	Female	Male		Male		Male	Female		Femal
						_	HS&B							_
Agriculture	232	3.88	7.89	0.99	1.85	1.59	6-48	0.32	2.08	0.00	4.16	0.00	7.21	0.0
Business	3642	54 74	30.70	82 • 38	27.06	72.46	20.89	75.65	18.78	79.90	29.10	63.02	23.94	82.7
Heai h Car⇒	73	0.98	0.45	1.18	0.70	3 54	0.6	0.80	0.00	0.89	0.00	1.33	0.00	0.0
rade ≛ Industry	2433	35.09	56.35	9.85	65.92	15.96	66-64	15.14	79.13	10.72	64.97	24.63	68.85	17.2
Honie Economics	223	3.02	2.52	3.44	1.10	3.54	1.66	6.56	0.00	6.80	1.78	9.41	0.00	0.00
Distributive Education	166	2.2 9	2.10	2.15	3.36	2.91	3.63	2.12	0.00	1.70	0.00	1.60	0.00	0.6
Total		16 2.00	190.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.0
Total n Total Row Percent	6769	100.00	1891 40.07	2026 41•32	453 42•60	536 44.63	816 47•10	677 43•46	58 61 • 37	59 54.86	98 60•06	97 51.84	38 48.79	20 44.6
							NLS							
Agriculture	222	5,59	11.35	1.71	9.30	0-83	8.39	1.40	14.07	5.14			9.42	1.91
Business	2539	67.96	45.95	85.67	39 • 39	74.72	52-41	89.97	37.13	74.75			46-89	85-25
Health Care	63	1.58	0.16	2.46	0.57	3.33	0.54	1.19	0.00	5.97			0	1.4
Trade & Innustry	661	17.53	J. 38	4-51	40.42	5.68	34.80	2.56	36.21	4.01			35.62	3. 16
Home Economics	112	2.32	0.92	1.62	4.39	9.18	0.63	2.15	1.69	4.68			3.26	3.76
Distributive Education	182	5.01	6-23	4.02	5.92	5.24	3.22	2.70	10.90	5.44			4.62	4.48
To†ai		100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00			100.00	100.00
T∩tain Tc⊦al Row Percent	3779	100.00	804 43.33	1141 57•38	351 40•52	489 44.43	178 36•69	310 51•14	68 52.19	98 59•14			139 36.83	201 50.86

NOTE: Percer ages are weighted; numbers are unweighted.



TABLE 5
SOCIOECONOMIC STATUS BY CURRICULUM PATTERN
FOR ALL RESPONDENTS
Percentage Distributions

SES Quertile	Total n	Total Column≴	Total	Concer- trator	Limited Concentrator	Concentrator/ Explorer	Explorer	incidental Personal	Self-Report Vocational	Ac ademic	Self-Remit Academic	General	Self-Report General	fieble
							HS4B							
Low	6180	25.45	100.00	13.13	14.30	8-32	6.51	17.2!	22.65	•30	2.84	1.64	13.11	
2nd	5552	26-14	100-00	10.93	12.82	8.67	6.77	16.82	25.15	.55	3-58	1.60	13.12	
3rd	5238	25.07	100.00	8.45	12.43	8-21	7.72	19.78	22.93	.79	4.95	1.68	13.07	
High	4794	23-34	100-00	4.28	11.41	6.97	5.91	26.19	17.21	1.58	10.47	2-29	13.69	
Total n Total Percent	21764	100-00	100-00	1424 9.32	1982 1 2. 77	1301 8-07	1084 6- 71	3127 19.85	6675 22.11	113 •79	160 7 5.3 4	297 1.79	4154 13-24	**
							NLS							
Low	1449	11.27	100.00	12.30	16.56	9.62	1.82	19.73	6.31	2.92	6.30	21.49	2.49	0.46
2nd	1754	20.73	100.00	11.52	15.87	7.87	1.68	26.43	5.29	2.82	6.22	19.89	2.04	0.37
3rd	2150	28.89	100.00	11.50	15.71	9.16	2.12	26.13	4.26	2.90	6.29	19.35	2.28	0.31
High	2562	39.11	100.00	5.08	10.52	6.05	1.32	33.02	2.44	10.85	10.90	17.88	1.17	0.22
Total n Total Parcent	7515	100-00	100-00	9.08	1100 13.81	636 7.73	137 1.68	2072 28.17	366 3.99	384 5.99	691 8. 08	1609 19•13	191 2.03	30 0-30

NOTE: Parcentages are weighted; numbers are unweighted.



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TABLE 6

SCHOCONOMIC STATUS BY SPECIALTY
FOR VOCATIONAL RESPONDENTS
Percentage Distributions

SES Quartile	Total n	Total Column \$	Total	'riculture	Bus iness	Health Care	Trade & Industry	Home Economics	Distributive Education
					<u>,H</u> \$	5 <u>88</u>			
Low	2228	27.60	100-00	4.23	53.46	0.95	36.31	2.74	2.30
2nd	1637	26.54	100-00	4.04	54.84	0.92	35.52	2.34	2.34
3rd	1455	24.66	100-00	4.69	56-04	1-44	33.24	2.54	2.05
H 1 gh	1227	21.20	100-00	2.17	57.94	0.63	31.96	4.86	2.43
Total n Total Percent	6547	100.0	100.00	224 3 . 86	3555 55.40	71 1.01	2319 34•42	218 3.02	160 2•28
					<u>NL</u>	<u>.s</u>			
Low	710	11•92	100.00	6.18	61.85	1.88	23.52	3.17	3.40
2nd	888	22.27	100.00	7.32	60.07	1.89	21.06	3.27	6.37
3rd	1097	31.51	100.00	5.35	66.35	1.94	18.46	2.28	5.61
нigh	1084	34.30	100.00	4.48	76.69	0.93	12.32	1.45	4.12
Total n Total Percent	3779	100.0	100-00	222 5•59	2539 67 . 96	63 1.58	661 17 . 53	112 2.32	182 5•01

NOTE: Percentages are weighted; numbers are unweighted.



TABLE 7

PERCENT WHO ARE MANDIC APPED AND PERCENT WITH LIMITED ENGLISH PROFICIENCY, BY RACE/ETHNICITY AND GENDER AND BY SES

	<u>To</u>	<u>otal</u>	Percent	Perce	ent with
Race/Ethnicity,	n	n	<u>Handlcapped</u>	Limited Engl	Ish Proficiency
Gender and SES	NLS	HS&B	HS&B	HS&B	NLS
Race/Ethnicity					
and Gender					
White	_				
Male	1805	7325	1 0.88	0-21	2.66
Female	2037	7599	10-21	0.30	3.79
Black Male	849	1204	4 4 74	A 7 0	
Female	1048	1294 1580	1 1 • 74 1 3 • 80	0•39 0•18	3•69 4•19
	1040	1500	1 3400	0+16	4. 19
<u>Hispanic</u> Male	402	1004	10.44		
Female	482 593	1994 1787	19•11 16•12	7•39 9•01	10.70
	333	1,0,	10.12	9.01	8.59
Native American					
Male	129	119	11.68	4.55	4.11
Female	171	104	21.34	2.89	2.97
Aslan					
Male		177	13.55	18.66	
Female		174	7•95	16.00	
<u>Other</u>					
Male	388	82	5.50	2.22	J.32
Female	413	52	5.30	7•77	2.75
Total	7915	22287	11.63	1.79	3.64
ES .					
Low	1 449	6180	14-00	3.22	7.04
2nd	1754	5552	12.05	C+92	4.37
3rd	2150	5233	11.06	0.75	3.15
Hìgh	2562	5794	9•39	0.58	2.64
Total	7915	217'24	11.68	1.38	3.64

 $^{^{\}rm a}{\rm Dlf}$ ferent criteria are used in the HS&B and NLS data sets. See appendix A for definitions.



TABLE 8

PERCENT WHO ARE HAND ICAPPED AND PERCENT WITH LIMITED ENGLISH PROFICIENCY, BY CURRICULUM PATTERN AND BY WOCATIONAL SPECIALTY

	To	<u>ital</u>	Percent		ont with
Curriculum Pattern and Vocational Specialty	n NLS	n HS&B	Hand I capped HS&B	Limited Engl	ish Proficiency ⁸ NLS
vocarional specialry	NLS		пэар	посо	NLS
<u>Curriculum Pattern</u>					
Concentrator	699	1490	11.87	1.53	3.04
Limited Concentrator	1100	2038	11.13	1.63	2.79
Concentrator/Explorer	636	1343	9 92	1.33	4.15
Explorer	137	1127	1 3	1.35	2.74
Incidental Personal	2072	3239	11-14	1.41	2.51
Vocational Self-Report	366	6766	11.66	0.98	4.28
Academ1c	384	114	7.97	0.23	2.92
Academic Self-Report	691	1629	6.96	1.12	5.26
General	1609	316	1 4.18	2.02	5.19
General Self-Report	1 91	4225	1 4.02	1.83	5.20
Unclassiflable	30	••		••	12.77
Tot al	7915	22287	11.63	1.39	3.64
vocational Specialty ^b					
Agriculture	222	232	1 4. 25	1.18	3.36
Bu sì ness	2539	3642	9•58	1.24	3.04
Health Care	63	73	13-11	0.56	3.89
Trade & Industry	661	2433	13-11	1.82	2.84
Hame Economiles	112	223	15.57	2.65	1.19
Distributive Education	182	166	9•01	1.15	1.03
Total	3779	6769	11.20	1.48	2.90

 $^{^{}a}\text{Dlfferent}$ criteria are used in the HS&B and NLS data sets. See appendix A for definitions.



bExcludes persons classified in the Academic, General, Explorer, some incidental Personal, and ϵ i Self-Report curriculum patterns.

Multivariate Analyses

Broad general descriptions of the relationships between high school training and special group membership have been provided by the descriptive tables presented in the first part of this chapter. The questions posed in the first chapter require controls for the potentially intervening circumstances that might alter the relationships between curriculum and special group membership on the one hand and postsecondary education and labor market outcomes on the other. Analyzing the effects of special group membership upon curriculum choices and assignments also requires a multivariate approach.

Factors Influencing Selection of High School Curriculum

As has been mentioned, the analysis undertaken in this study utilizes a number of controls to overcome potential selectivity bias that might distort the estimated labor market effects of the high school vocational curriculum. The relation of these controls to selection of curriculum was evaluated therefore by estimating an equation that included these controls as independent variables with curriculum choice as the dependent variable. The estimation of this equation was first carried out by ordinary least squares (OLS), followed by a probit analysis, as described in the methodology chapter.

The equations for the vocational curriculum versus all others are presented in table 9.* Some of these variables appear to function in the expected direction; others do not. In NLS-Youth, SES and academic achievement/ability are associated with reduced likelihood of being in the vocational curriculum in high school. The academic achievement/ability measure, however, was administered after the high school curriculum was completed for the majority of the respondents. In HS&B, on the other hand, the academic achievement/ability measure was administered in the 10th grade, at a time when the curriculum pattern could not have had a major influence. But the measures are consistent in both sign and significance in both databases, thus supporting the validity of considering achievement/ability, along with SES, as an influence on curriculum selection.

Grade point average (GPA) did not operate in the expected way. In the NLS-Youth data, GPA in the 10th grade is not significant. There is, however, a significant coefficient for missing



^{*}The significance level is set at 0.05 or less because both databases have desi effects that approach a value of 2.

TABLE 9

VOCATIONAL CURRICULUM VS. ACADEMIC AND GENERAL

<u>H:</u>	SAB-OLS		<u>P</u>	LS-OLS			HS&B-PROB	<u> </u>		LS-PROBIT	
Parameter Estimate	t-value	HSLB n	Parameter Estimate	t-value	NLS n	Maximum Likelihood Estimate	t-value	Partial Darivetive	Maximum Likelihood Estimate	t-vel us	Pertial Carivative
		_									
								-0. 037	-0.337*	-3.92	-0.121
								-0.033	0.184	1.39	0-066
							-2.05	-0.058	-0.217*	-3.06	-C.078
-0.035	-0.87	179	-0.074	-2.62	309	-0.098	-0.92	-0.039	-0.268*	-2.97	-0.096

			0.074*	2.85	469	-0.200*	-3.35	-0.080	0.1924	2,51	0.069
			0.154	3.91	147	-0.079	-0.54			3.72	0.156
		511	0.047*	2.16	820	-0.164*	-2.44				0.014
-0.016	-1.06	2304	0.109*	6- 75	1723						0.111
-0.086*	-2.11	171	0.067*								0-068
-0.051*	-2.85	881							0.190-	2.51	U+U00
0.094	0.53	41									
-0.059	-1 .85	273	-0.044	-1.55	270	-0.156	-1.86	-0.062	-0.128	-1.44	-0.046
-0.036	-0.91	195				-0.094	-0.90	-0.038			
0.007	0.42	1604	-0.028	-1.58	1104	0.020	0.43	/1 000	-A APR	-1 54	-0.030
0.014											
											-0.006
											-0.043
22320	2023	2211	-0.011	-0.39	309	0+069-	2.22	0.027	-0.038	4.40 -0.46	0.079 -0.013
	Parameter Estimate -0.035 -0.032 -0.055 -0.035 -0.076° -0.030 -0.062° -0.016 -0.086° -0.051° 0.094 -0.059 -0.036	-0.035 -1.71 -0.032 -0.60 -0.055* -2.03 -0.035 -0.87 -0.035 -0.87 -0.036 -0.53 -0.066* -2.41 -0.016 -1.06 -0.086* -2.11 -0.051* -2.85 0.094 0.53 -0.059 -1.85 -0.059 -1.85	Per meter Estimate 1-value n -0.035 -1.71 880 -0.032 -0.60 86 -0.055 -2.03 426 -0.035 -0.87 179 -0.076 -3.35 724 -0.030 -0.53 80 -0.062 -2.41 511 -0.016 -1.06 2304 -0.086 -2.11 171 -0.051 -2.85 881 0.094 0.53 41 -0.059 -1.85 273 -0.036 -0.91 195 0.007 0.42 1604 0.014 0.89 2833 -0.059 -3.27 1570	Parameter Estimate 1-value n Estimate -0.035 -1.71 880 -0.101* -0.032 -0.60 86 0.066 -0.055* -2.03 426 -0.066* -0.035 -0.87 179 -0.074* -0.030 -0.53 80 0.154* -0.062* -2.41 511 0.047* -0.062* -2.41 511 0.067* -0.051* -2.85 881 0.199* -0.059* -2.85 881 0.094 0.53 41 -0.059* -0.050* -1.85 273 -0.044 -0.036 -0.91 195 0.007 0.42 1604 -0.028 -0.079* -3.21 1570 -0.040* -0.026* 2.23 3517 0.080*	Parameter Estimate 1-value n Estimate 1-value n Estimate 1-value n Estimate 1-value n Estimate 1-value 1-value n Esti	Permeter Estimate 1-value n n Estimate 1-value n n n n n n n n n n n n n n n n n n n	Per meter Est Imate t-value n Est imate Est imate t-value n Est imate Est imate t-value n Est imate t-valu	Permeter Estimate 1-value n Estimate 1-value 1-value 1-value n Estimate 1-value 1-value 1-value 1-value n Estimate 1-value 1-value 1-value n Estimate 1-value 1-value 1-value 1-value 1-value 1-value 1-value n Estimate 1-value n Estimate 1-value n Estimate 1-value 1-value 1-value n Estimate 1-value	Permeter Estimate t-value n HSLB Parmeter Estimate t-value n HSLB n Harmeter Estimate t-value n HSLB n Harmeter Estimate t-value n HSLB Likelihood Estimate t-value n HSLB Derivative n Harmeter t-value n HSLB Likelihood Estimate t-value n HSLB Derivative n HSLB Likelihood T-value n HSLB Derivative n HSLB Likelihood Estimate n HSLB Derivative n HSLB Likelihood T-value n HSLB Likelihood T-value n Derivative n HSLB Likelihood T-value n HSLB Likelihood	Parameter Estimete 1-value n Parameter Estimete 1-value n Estimete 1-value Derivative Estimete Estimete 1-value n Estimete 1-value Derivative Estimete 1-value Derivative Estimete 1-value n Estimete 1-value Derivative Estimete 1-value Derivative Estimete 1-value n Estimete 1-value n Estimete 1-value Derivative Estimete 1-value n Estimete 1-value Derivative Estimete 1-value n Estimete 1-value	Parameter Estimate t-value n Parameter Estimate t-value n Estimate t-value n Parameter t-value Durivative Estimate t-value Durivative Estimate t-value n Durivative Estimate n Durivative n Duriva

NOTES: "indicates that the chance probability of an effect this large is \leq .05. MD refers to missing data.



TABLE 9--Continued

	HS&B-OLS Perameter HS&B Estimate t-value n			NLS-OLS		HS4B-PROB(T			NLS			
		t-val ue		Par ameter Estimate	t-val ue	NLS n	Maximum Likelihood Estimate	t-value	Partial Derivative	Maximum Likelihood Estimate	t-vel ue	Partial Derivative
Other												
Absentee ism	-0.007	-1.53	7478									
MD Absenteel sm	-0.051	-0.25	7473 38				-0.018	-1.52	-007			
Discipline Problems	0.023	i.31	1014				-0.128	-0.23	-0.051			
MD Discipline Problems	0.098	1.39	141				0.060	1.31	0.024			
Trouble with Law	-0.002	-0.05	297				0.259	1.40	0.103			
MD Trouble with Law	-0.095	-1.40	178				-0.005	-0.06	-0,002			
Oth-Grade Asplrations	-0.109*	-8.21					-0.247	-1.40	÷0.098			
MD 8tir-Grade	-0.029	-1.53	3729 963				-0.281 *	-6-08	-0.112			
Aspl rations	-0.029	-1.73	90)				-0.075	-1.53	-0.030			
Work at Age 35									-0.050			
10th-Grade	0.027*			-0.018	-1.02	5692						
Grave Point Average	0.02/-	3.05	7485	0.006	0.61	5845	0.072*	3.04	0.029	-0.049	-0.94	-0. 01 c
MD 1(# h=Grade	0.024	A 35					3.0.2	3.04	0.029	0.027	0-82	0.008
Grace Point Average	0.024	0. 25	26	-0.415*	-21.34	622	0.057	0.23	0.023	0.1.50		
Ability	-0.0108						••••	0127	0.025	-2. 15*	-14.85	-0.786
MD Ability	-0.010	-11.32	7379	-0.001*	-3.48	6270	-0.025*	-11.20	-0.010		_	
School Attitude	-0.035	0.68	132	-0.004	-0-11	197	0.092	0.70	-0.010	-0.005	-3.66	-0.002
ME School Attitude				0.004	1.78	3411	0.072	0.70	0.036	-0.644	-0.41	-0.016
				-0.026*	-2.06	3056				0.011	1.72	0.004
Mork in High School	0.050	1-96	7072			2420	0.131			-0.073	-1.97	-0.026
MD Nork In High School SES	(-363	0.43	36				0.223	1-96	0-052			·
	- 0.€ 52*	-5.92	7436	-0.008*	-10-52	6467		0.42	0.089			
MD SES	0.012	0.15	75			J407	-0-137*	-5.92	-0.055	-0.025°	-10.46	-0.009
Sel f-esteen	-0.011	-1.38	7367	-0.003	-1 .84	6405	0.027	0.13	0.011			
MD Self-estem	-0-010	-0.14	144	-0.004	-0.08	62	-0.030	-1.41	-0.012	-0.006	-1.74	-0.003
Intercept	0.974	18.96	7511	0.457	5.46		0.026	0.14	0.010	0.008	0.05	0.003
				00477	7.40	6467	1.240	9.13	0.495	0.790	3.13	0.283

R² = 0.065 Adj. R² = 0.060 F-statistic = 14.747

R² = 0.117 Adj. R² = 0.114 F-statistic = 34.174



data on this variable, thus making a conclusion about its nonsignificance unwarranted because one does not know whether those in the vocational curriculum had higher or lower grades than the others. GPA in the 10th grade is significant and positive in the HS&B data. This is not expected because more academically successful students are believed more likely to be in an academic curriculum. Rural residence is associated with greater likelihood of being in the vocational curriculum, but living in the West has the opposite association.

Other information of interest to this study is available in In both databases, Hispanic and black men are these equations. less likely than majority white men to be in the vocational cur-The coefficients are uniformly negative, and also significant, except for Hispanic men in the HS&B data. For women, the information in the two databases does not agree. All female respondents in the NLS-Youth survey are more likely to be in the vocational curriculum according to the OLS estimation. probit estimate does not confirm the OLS finding for black women, although the sign is in the same direction and the critical rat o approaches significance. In the HS&B survey, however, both black and Hispanic women are less likely to be in the vocational cur-There is no readily apparent explanation for this anomaly. Two possibilities are these. The NLS-Youth respondents are, on the average, about 5 years older than the HS&B respondents, allowing for the possibility of a changing trend. may also be a sampling problem reflected in this finding. high degree of agreement in other findings, discussed subsequently, suggests that the first explanation is more tenable.

When one turns to the equations estimating the likelihood of completing the academic curriculum (table 10), some similar patterns emerge. Achievement/ability and SES are positively associated with completing an academic curriculum. Grade point average in the 10th grade is also higher for those in this curriculum than for those in the others, on the ave age. Living in a rural area does not seem to have an effect. Region of the country shows a mixed effect, again calling attention to possible differences in the databases.

The picture for the groups of special interest is not strongly established, but shows some interesting tendencies. When compared with white males, the NLS-Youth respondents who are black or Hispanic, whether male or female, all show a higher frequency in the academic curriculum. The OLS coefficients are significant in only three of the eight cases, but the probit analysis produces significant results for the black respondents as well. White women, on the other hand, are significantly less likely to be in the academic curriculum in both databases.

Except as noted, the probit analyses confirmed the results of the OLS equations. The sobering conclusion about these



TABLE 10 ACADEMIC CURRICULUM VS. VOCATIONAL AND GENERAL

	HS4B-OLS				LS-OLS			HS4B-PROB1	<u>T</u>		CS-PROBIT	
	Parameter Estimate	t-value	HS&B n	Parameter Estimate	t-value	NLS n	Maximum Likelihood Estimete	t-value	Partial Derivative	Meximum Likelihood Estimete	t-val us	Partial Derivative
Special Group Hele Hispanic Native American Black Other Female Hispanic Native American Black White Other Handicapped Limited English Proficient PD Limited English Proficient	0.011 0.044 0.004 0.092* 0.003 0.018 0.010 -0.034* 0.083* 0.018 -0.066 -0.007	0-86 1-38 0-22 3-84 0-22 0-55 0-63 -3-83 3-46 1-72 -0-63 -0-39	880 86 426 179 724 80 511 2304 171 881 41 273	0.01 5 0.034 0.027 0.003 0.010 -0.096* 0.010 -0.033* -0.024	0.78 1.03 1.63 0.13 0.56 -3.35 0.63 -2.83 -`.20	379 108 654 309 469 147 820 1723 333	0.023 0.386 0.031 0.404* -0.070 0.016 0.098 -0.195* 0.042* 0.073 -0.840 -0.154	0.25 1.81 0.27 2.66 -0.69 0.06 0.93 -3.47 2.88 0.94 -0.41 -0.92	0.003 0.042 0.003 0.004 -0.008 0.002 0.011 -0.021 0.043 0.008 -0.091 -0.017	0.070 0.147 0.268* 0.054 0.057 -0.643* 0.190* -0.137* -0.069	0.63 0.92 2.94 0.53 0.54 -3.24 2.20 -2.33 -0.68	0.011 0.023 0.041 0.008 0.009 -0.100 0.029 -0.021 -0.011
Locale Northeast South West HD Rur al	0.036* -0.022* -0.059* 0.005	3.41 -2.34 -5.32 0.64	1604 2833 1570 3517	0.154° 0.110° 0.010 -0.025° 0.025	12.15 10.23 0.76 -1.98 1.27	1104 2338 1202 866 309	0.193° -0.139° -0.377° 0.027	2.85 -2.18 -4.82 0.58	0.021 -0.015 -0.041 0.003	0.749* 0.586* 0.075 -0.108 0.179	11.34 9.86 0.99 -1.54 1.73	0-116 0-090 0-011 -0-017 0-028

NOTES: "Indicates that the chance probability of an effect this large is \leq .05. MD refers to missing data.

HS4B-PROBIT

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NLS-PROBIT

TABLE 10-Continued

	<u>H:</u>	SLB-OLS		<u> </u>	ILS-OLS			HS4B-PROB	<u>T</u>		LS-PROBIT	
	Par ameter Estimate	t-val uo	HS&B n	Paramoter Estimate	t-val ue	NLS n	Maximum Likel!hood Estimate	t-value	Pertial Derivative	Maximum Likelihood Estimate	t-val ue	Pertial Derivative
Other												
Absenteel sm	-0.005	-1.80	7473				-0.048*	-2.42	-0.005			
MD Absentee I sm	-0.058	-0.47	38				0.295	0-15	0.032			
Discipline Problems	-0.001	-0.15	1014				-0.091	-1.08	-0.010			
MD Discipline Problems	0.004	0.08	141				-0.016	-0.04	-0.002			
Trouble with Law	-0.013	-0.74	297				-0.170	-1.11	-0.018			
MD-Trouble with Law	-0.002	-0.04	178				-0.258	-0.72	-0.028			
8th-Grade Aspirations	0.060*	7.61	3729				0.418*	7.14	0.045			
MD 8th-Grade	0-005	0.42	963				0.013	0-14	0.001			
Aspirations												
Work at Age 35				0.041*	3.21	56 92				0.281*	3.64	0.043
10th-Grade	0.051 *	9.63	7485	0.067	9.94	5845	0.331*	8.52	0-036	0.272*	7.64	0.042
Grade Roint Average												
MD 10th=Grude	-0.041	-0.73	26	-0.116*	- 8. 24	622	-0.111	-0.23	-0.012	-1 -666*	-6.58	-0.257
Grade Rolnt Average	0.0075											
Ability	0-007	14.52	7379	0.003	9.36	6270	0-052*	13-68	0.006	0.019°	10-15	0.003
MD Ability Schorl Attitude	-0.046	-1.53	132	0.015	0.63	197	-0-138	-0.57	-0.015	0.271	1.99	0.042
MD of Attitude				0-003*	1.96	3421				0.019*	2.16	0.003
				-0.001	-0.05	3056				-0.040	-0.85	-0.006
Mork in High School	-0.021	-1.36	7072				-0.107	-1 - 09	-0.012			
MD Mork in High School		0.29	36				0.907	0-90	0.098	_		
SES MD SES	0.028 ° -0.040	5.31	7436	0.006	10-43	6467	0.159*	4.68	0.017	0.029*	9.50	0.005
Self-esteen	0.002	-0.88	75				-1.206	-1.28	-0.130			
MD Self-esteam	-0.0 02	0.40	7367	0.000	0.28	6405	0.020	0.60	0.002	-0.000	-0.02	-0.000
		-0.13	144	0.004	0.09	62	-0.258	-0.67	-0.028	0.007	0.03	0.001
Intercept	-0.381	-1 2.47	7511	-0.414	-6 .86	6467	-4.974	-21.54	-0.538	-5.431	-15.60	-0.839



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R² = 0.145 Adj. R² = 0.141 F-stetistic = 43.530 findings is that the question of factors influencing vocational curriculum selection is, at best, only partially answered. The likelihood of being in one or the other of the curricula is not well established, as evidenced by the relatively low R²s.

Factors Influencing Entry and Type of Postsecondary Schooling

Another set of variables that may influence labor market outcomes of the secondary curriculum are those representing characteristics that reflect possible differences in the earnings potential of those who go on to postsecondary schooling compared with those who do not. These variables are also interesting in their own right in relation to the groups of special interest. As described in chapter 3, the equations were estimated first by OLS, and then a probit analysis was run if the specification appeared interpretable.

There are three sets of equations in this analysis. first examines the antecedents of deciding whether or not to enter postsecondary education in any formal way. The results from the two databases are in substantia, agreement (table 11). In the NLS-Youth data, the academic graduates, whether identified by self-report or by transcript, are more likely than general students to go on to some form of postsecondary education. findings are generally confirmed when the probit technique is Vocational graduates do not show a disadvantage in postsecondary attendance in comparison to general graduates. HS&B respondents who have followed an academic curriculum are also more likely than those in the general curriculum to enter some kind of formal postsecondary school. Some vocational curriculum graduates, those in training-related jobs, are less likely to enter such schooling. However, the fact of having the training-related job may be a better explanation than the curriculum because those who followed the same curriculum but were not working in such jobs were no less likely than the general graduates to go on. Overall, the association of high school curriculum with postsecondary schooling appears to be somewhat more limited than commonly believed.

Ability, SES, and loth-grade GPA are strong antecedents of postsecondary schooling. (Recall, however, the timing of the achievement/ability measure in the NLS-Youth.) Also, the regional variables show differential influences in favor of postsecondary attendance, consistently for living in the West. The self-esteem measures are consistently and positively associated with postsecondary entry. Eighth-grade aspirations are also positive, but several variables describing high school and personal experience (for example, school discipline problems, trouble with the law) are negative. These last three variables are available only in the HS&B data.

TABLE 11
FACTORS INFLUENCING POSTSECONDARY SCHOOL ATTENDANCE

	HS4B-OLS			NLS-OLS			H-48-PROBIT				NLS-PROBIT		
	Parameter Estimate	t-value	HS&B n	Par anotor Estimate	t-value	NLS n	Maximum Likelihood Estimate	t-value	Pertial Derivative	Maximum Likelihood Estimate	t-value	Pertial Derivative	
Education				_									
Concentrator	-0.029	-1.70	738	-0.014	-0.75	676	-C.163*	-3.13	-0.056	-0.110	-1.71	-0.034	
Limited	-0.011	-0.73	1157	0.010	0.65	1073	-0.080	-1.71	-0.027	-0.044	-0.79	-0.014	
Concentrator							-01000		-00027	-01044	-00/9	-0.014	
Concen trator/	0.023	1.41	785	-0.027	-1.45	619	0.041	0.75	0.014	-0-123	-1.79	-0.038	
Explioner							••••	••••	000.4	-01125	-10/9	-0.000	
Academic	0.052*	2.96	763	0,78*	4.75	942	0.433*	5.14	0.149	0.391*	5.13	0-121	
SR Vocational	-0.022	-1.05	612	-0.009	-0.37	356	0.085	-1.22	-0.029	-0.013	-0.14	-0.004	
SR Academic	0.051	1.53	171	0.145*	7.47	660	0.316*	20	0.109	0.518*	6.19	0.160	
Concentrator TR	-0.125*	-4.53	246			000	015.0	1110	06109	0.510	0.13	U- 10U	
Limited	-0.048	-4.80	262										
Concentrator TR		*****											
Concentrator/	-0.041	-1.13	133										
Explorer TR	***************************************												
Indeterminant Voc.	-0.117*	-1.98	49										
MD Transcripts	-0-036	-0.62	85										
Special Group													
Male													
HI spenic	0.056*	2.83	603	0.112*	4.92	465	0.212*	3.08					
Native American	0.026	0.67	116	0.014	0.36	125	0.212-		0.073	0.448*	5.03	0-139	
Black	0.025 0.043	2.02	498	0.072*		815		0-81	0.037	-0.111	-0.08	-0-003	
Other	0.130*	2.02 3.96	179	0.072	3.73 0.35	374	0.215*	2.95	0.073	0.271*	3-62	0-084	
Female	0.130	2.90	1/9	0.008	0.27	2/4	0-617*	4.56	0-212	0.094	1.03	0.029	
Hispanic	0.136*	6.65	579	0.138*	6.46	E 01	0.400						
Native American	0.136"	1.84				581	0.492*	6.77	0.169	0.486*	5.89	0-150	
Black	0.062		89	-0.071*	-2.09	168	0.334	2.25	0-115	-0.195	-1.65	-0.060	
White	0-225" 0-057 °	11.24 4.80	610	0-174*	9.52	1029	0.806*	11.02	0.277	0.517	7.07	0.158	
mire Other			2640	0.001	0.10	1978	0.208*	4.85	0.071	0·f 12	0.22	0.004	
landicapped	0-173*	5.28	184	0.068*	2.92	399	0.765*	5.57	0.263	0-182	1.99	0-056	
	-0.007	-0.47	925										
4D Hendicapp d	0.060	0.32	11				_						
Limited English Proficient	0.079*	2.91	273	0.072*	3-15	351	0-276*	2.90	0. 395	0-232*	2.50	0.072	
MD Limited English Proficient	-0.037	-1.04	223				-0.175	-1.44	-0.603				

NOTES: *Indicates that the chance probability of an effect this large is \geq .05. SR refers to self-report, TR refers to training-related, MD refers to missing data.

TABLE 11 -- Continued

	HS&B-CLS			MLS-OLS			HS&B=PROBIT			NLS-PROBIT Next Insum		
	Par amoter Est mate	t-value	HS&B n	Parameter Estimate	t-value	NLS n	Likelihood Estimate	t-val ue	Pertial Derivative	Likelihood Estimate	t-value	Pertial Derivative
Locale						1.474	0.020	0.39	0.007	0,038	0.68	0.012
Northeast	0-010	0.71	1748	-€.001	-0.10	1 436 2797	0.020	1.23	0.007	0.264*	5.31	0.082
South	0.018	1.44	2972	0.049	3.87		0.354	1.99	0.037	U. 132	2.61	0-047
tlest _.	€ 044 •	2.88	1585	₹-033°	2.22	1 382	-0.06v	• 74	-0.021	-0.212*	-3.96	-0.065
Rural	-0.613	-1.35	3396	-0.70*	-4.75	964	₽U•U 0\	• •/4	-0.021	-0.236	-1.60	-0.073
MD Rural				√.139*	-5.90	370				-0.2 D	-1.00	-0.073
Other .												
Absenteelsm Mn Absenteelsm	-0.021* -0.329*	-5.63 -2.16	7958 15				-0.068*	- 5-13	-0.023			
Discipline Problems	=0.054*	-3.71	1024				-0-171*	-3.49	-0.059			
		-j. /j	107				-0.244	-1.29	-0.094			
MD Niscipline Propiess	-0.021	=0.87	306				-01244		0.004			
Trouble with Law MD Trouble with Law	0.021	1.67	146									
	0.035*	5.07	7880				0-120*	4.85	0.041			
Mork Composite	0.035"	2.42	70 BU				0.605	2.41	0.208			
MD Work Composite	0.162*	13.11	4022				0.461*	12.32	0.158			
8th-Grede Aspirations MD 8th-Grede	-0.052	٠٠.)3	951				-0-148*	-2.81	-0.05			
Aspirations	-0.02	-0.00	721					200.				
Mork at Age 35				0.110*	7.55	6753				0.378*	7.05	0.117
won katr∧ge ∋> 10 h⊫3rade	0.058*	7.65	7232	0.038*	4.79	6219	0.216*	7.91	0.074	0.145*	4.69	0.045
Grade Point Average	0.000	7.07	1232	01050	4017	04.19	042.0	,,,,				
MD 10th=Grade	-0.044*	-2.19	741	-0.044*	-2.99	1475	-0-155*	-2.25	-0.053	• 1 72*	-3.00	-0-053
Grade Point Aver⊲ge	-0.044	-2019	/41	-01044	2077	1412	0-100		*****			
Ability	0.011*	16.45	7860	0.007*	20,66	74 51	0.039*	15.79	0.013	0.022*	16-26	0.007
MD Ability	- 3-045	-1.08	113	-0.028	-1.01	243	-0.253	-1.88	-0.087	-0.250	-2.38	-0.077
School Attitude	. 3.04 3	-1.00	117	-0.000	-0.10	3965				- ^.003	-0.43	-0.001
MD School Attitude				0.016	1.18	3729				J . 080	1.50	0.025
Work in High School	-0,009	-0.73	6705				-0.051	-1.10	-0. 018			
Work in High School MD Nork in High School		0.63	32				0.147	0.58	0.050			
Hours Worked Per Weak	0.047	0.03	22	-0.001*	-4.53	7694				-0.013*	-8.73	- 0.004
SES	0.121*	16.78	793	0.007*	10.25	7694	0.460*	17.00	0.158	0.028*	10.64	0.009
MD SES	-0.063	-0.87	77.3				-0.435*	7.02	-0.150			
Self-esteem	0.016*	2.43	78 9	0.006*	4.42	7614	0.065*	78	0.022	0.019*	3.85	J-006
MD Self-esteen	0.166*	2.22	11.4	0.006	0.14	80	0.392	1.65	0.135	0.044	0.24	0.014
Intercer:	-0.147	-3.71	7973	-0.227	-3.22	7694	-2.216	45.77	-0.762	-2.98 3	-10-41	-0.924

R² = 0.266 Adj. R² = 0.262 F-statistic = 53.874

R² = 0.198 Adj. R² = 0.195 F-statistic = 59.118

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. 6)

Among the groups of special interest, Hispanics and blacks, both men and women, are more likel than white men to go on to postsecondary education, other things being equal. White women are also significantly more likely to do so among the HS&B respondents, but the tendency is not significant in the NLS-Youth Likewise, the signs are all positive for Native Americans, but in general, the differentials are not significant. There is no observable differential effect for being handicapped, but limited English proficiency has a positive association with continuing education after high school among the respondents in both databases. Recall that these results are for high school graduates, and that controls for the disadvantaging factor of SES are in place. Keeping this in mind, these results are encouraging for the groups of special interest. And although little impact of curriculum is consistently observable, the retention of these variables in the equations for labor market outcomes was considered advisable.

Factors Influencing Types of Postsecondary Schooling

When the choice of type of postsecondary school is the consideration, the high school curriculum may have a more notable effect (table 12). The choice of a vocational-technical school over other forms of postsecondary schooling seems to be favored by a larger proportion of high school vocational Concentrators and Limited Concentrators than general curriculum graduates, but this results are not confirmed by the probit estimation. This is not to say that the vocat_onal graduates go primarily to the vocational-technical postsecondary schools, but rather that they may go to these more frequently than general graduates do. Indeed, other evidence shows that the most common type of postsecondary school for high school vocational graduates is the 4-year college or university (Campbell and Basinger 1985). The percentage attending the vocational-technical schools is simply higher for high school vocational graduates than the general or academic graduates. The academic curriculum, on the other hand, does not differ from the general curriculum, as determined by transcripts, but self-report is an antecedent of choosing a 2- or 4-year college if one accepts the probit results.

When one considers the choice between the 2- and 4-year colleges (table 13), the academic curriculum in high school is shown to increase the probability of attending 4-year schools. The vocational curriculum based on self-report is associated with a reduced probability of attending 4-year schools, but the vocational curricula derived from transcripts are not. The factors most consistently related to the choice of a 4-year rather than a 2-year school are the same ones that figured in the decision to attend any postse ondary school: SES, GPA in the 10th grade, and the achievement/ability measure. Also, higher self-esteem is associated with the higher levels of schooling.



FACTORS INFLUENCING CHOICE OF SCHOOL TYPE,
OTHER 2-YEAR AND 4-YEAR VS. VOCATIONAL-TECHNICAL

	<u>NL</u>	.S - OLS		NLS=PROBIT					
				Max1mum					
	Parameter Estimate	t-value	NLS n	Likelihood Esiimate	t - value	Partial Derivativ			
Education									
Concentrator	- 0.124*	- 6.91	427	- 0.452*	- 5.25	-0.07 5			
Limited	- 0.073*	- 5.02	714	- 0∙269*	- 3.54	- 0.045			
Concentrator									
Concentrator/ Explorer	-0.028	- 1.55	392	-0. 131	-1.32	-C.02?			
Academic	0.027	1.86	847	0.334*	3.18	0.056			
SR Vocational	-0.146*	-5.69	200	-0.378*	-2.94	-0.063			
SR Academic	0.027	1.51	561	0.208	1.82	0.035			
	0.027	1.001	701	0.20.7	141/2	0.033			
Special Group Male									
Hispan ic	0.101*	4.67	321	0.471*	3.62	0.078			
Native American	-0.013	-0.33	80	0.026	0.13	0.004			
Black	0.141*	7.30	470	0.737*	6.16	0.123			
Other	0.009	0.42	272	-0.014	-0.11	-0.002			
Female									
Hispar .	0.136*	6.65	401	0.503*	4.23	0.084			
Mative wherlean	-0.010	-0.28	96	- 0.135	- 0.79	-0.022			
B [†] ack	0.128*	7.32	729	0.547*	5.33	0.091			
V'n I te	-0.014	-i.05	1 395	~ 0.142	-1.96	-0.024			
Otner	0.054*	2.58	314	0.223	1.73	0.037			
Limited English	0.069*	3.13	241	0.405*	2.87	0.067			
Proficient									
Locale									
Northeast	0.046*	3.23	1009	0•251#	3.17	0.042			
South	0.062*	5.08	1943	0.349*	5.13	0.058			
West	0.086*	5.99	98 7	0.541*	6.32	0.090			
Rural	-0.065*	-4.33	579	- 0.231*	- 3.05	-0.038			
MD Rural	-0.049	-1.9 5	202	- 0•257	-1.24	-0,043			
Other					2.27				
Work at Age 35	0.028	1.87	4812	0.166*	2.03	0.028			
10th=Grade	0.046*	6.08	4369	0.262*	6.12	0.044			
Grade Point Average				0.070	0.01	0.012			
MD 10th-Grade	0.015	1.03	972	0.070	0.81	0.012			
Grade Point Average		44.60	F + 0.7	0.040*	0.42	0.007			
Ability	0.004*	11.62	5197	0.019*	9.42	0.003			
MD Ability	0.027	0.95	144	0.049	0.30	0.008			
School Attitude	0.001	0.44	2624	- 0.001	- 0.08	~0.000			
MD School Attitude	0.027*	2.01	2717	0.121	1.60	0.020			
Hours Worked Per Week	-0.001*	-4.79	5341 5341	-0.014* 0.029*	- 6.86 7.90	+0₊002 0₊005			
SES	0.005*	8.01	5341		7.90 2.07				
Self-esteem	0.003*	2.49	5291	0.014*	2.07 =1.35	0.002 -0.055			
MD Self-esteem	-0.079	-1.68	50 57.41	-0.350 -2.430	-1. 35 -5.94	-0.055 -0.406			
Intercept	0.223	3.21	5341	~2.439	- 7.94	-0.400			
A		0.150 0.145							
	U 1 0 1 1 - 1	7 - 1 - 7							

NOTES: *Indicates that the chance probability of an effect this large is \leq .05. SR refers to self-report, MD refers to missing data.



TABLE 13

FACTORS INFLUENCING CHOICE OF SCHOOL TYPE,
2-YEAR VS. 4-YEAR

	<u>N</u>	LS-OLS		NLS-PROBIT					
	Parameter		NLS	Maximum Likelihood		Partial			
	Estimate	t∽value	n	Estimate	t⊷val ue	Derivati			
Education									
Concentrator	-0.048	-1.67	300	-0.144	-1.61	- 0.053			
Limited	-0.006	-0.25	551	-0.073	-1.03	- 0.027			
Concentrator				0.075	, • 0 5	-0.027			
Concentrator/	0.016	0.60	323	0.059	0.67	0.022			
Explorer		••••	323	0.079	0.07	0.022			
Academic	0.086*	4.24	816	0.259*	3.79	0.006			
SR Vocational	-0.099*	-2.38	1 37	~0.322 *	-2.46	0.096			
SR Academic	0.116*	4.56	522	0.313*	72.45 3.70	-0.120			
Constal O	01,10	4.70	722	0.010	3.70	0.116			
Special Group Male									
Hispanic	0.052	1.64	284	0.158	1.54	0.050			
Native American	0.013	0.22	62	0.129	0.66	0.059			
Black	0.195*	6.80	410	0.129	0.0n 5.94	0.048			
Other	0.008	0.24	235	0.001		0.215			
Female	0.000	0.24	239	0.001	0.01	0.000			
Hispanic	0.056	1.85	353	0 177	4 0.				
Native American	-0.017	0.31	76	0.177	1.82	0.066			
Black	0.094*	3.59		-0. 045	-0.27	- 0.017			
White	0.094		619	0.314*	3.63	0.117			
Other		0.62	1156	0.048	0.77	0•018			
Limited English	0.031	1.03	283	0.045	0.46	0.017			
Proficient	0.012	0.38	214	0.048	0.45	0.018			
MD Limited English Proficient									
Locale									
Northeast	0.010	0.00	077	2 264					
	0.019	0.89	873	0.064	0.21	0.024			
South Nest	-0.024	-1.30	16 62	~ 0•056	- 0.93	-0.021			
	-0.155*	7.33	887	- 0.480*	- 7.01	- 0.178			
Rural 40 Bural	~0.009*	-2.95	432	-0.242*	- 3.32	- 0.090			
1D Rura!	~0.047	- 1.25	164	- 0.319	-1 •66	- 0•118			
other	0.0463	2 02			_				
York at Age 35 Oth - Grade	0.046*	2.02	4122	0.074	0.99	0.027			
	0.068*	6.07	3709	0.211*	5.73	0.078			
Grade Point Average			_						
4D 10th - Grade Grad Point Average	-0.029	- 1.30	844	-0.082	-1.15	-0.030			
Mollity	0.007*	12.31	4434	0.019*	10.35	0.007			
⁴ D Ability	0.116*	2.69	119	0.295	1.96	0.110			
School Attitude	-0.002	-0.83	2170	-0.013	-1.46	-0.005			
ID School Attitude	-0.015	-0.73	2383	-0.064	-0.95	-0.024			
ours Worked Per Week	-0.002*	-4.97	4553	-0.011*	-6. ⁻⁷				
SES	0.004*	4.49	4553	0-013*	4.35	+0.004			
Self-esteem	0.004*	2,24	4516	0.015*		0.005			
1D Self-esteem	-0.037	-0.50	4916 37	-0.174	2.59	0.006			
ntercept	- 0.156	~1.49			-0.70	-0.065			
J. Jop :			4553	- 1.977	- 5.55	~ 0.735			
	R ² = 0. dj. R ² = 0.	151							

Adj. $R^2 = 0.145$ F-statistic = 25.057

NOTES: *Indicates that the chance probability of an effect this large is \leq .05. SR refers to self-report, MD refers to missing data.



Hispanics and blacks, both men and women, tend to select 2-year schools over vocational-technical schools and 4-year schools over 2-year schools. The differentials are not significant for the Hispanics in the case of the 2-year or 4-year choice, but the direction of the choice is consistent. White women, on the other hand, are not differentiated from white men in their choice between these two types of postsecondary schooling. Those for whom English is a language of limited proficiency tend to be more often enrolled in 2- or 4-year schools than vocational-technical schools. The probit results confirm these findings.

From the standpoint of model specification, it is important to note that all of the variables that are significantly related to the decision to take postsecondary education appear in the labor mark it outcome equations. With respect to the groups of special interest, the data show an encouraging trend toward the use of the higher levels of postsecondary education on the part of the Hispanic and blacks. The trend is less encouraging for white women. There is no evidence of systematic selectivity on the part of any group.

These findings are tempered by the fact that the specifications used, and those available for sufficient numbers of respondents in the two databases, left much of the variation in choice of attendance and type unexplained. In fact, the two equations differentiating type of attendance using the HS&B data could not be interpreted. Thus, the findings reported here are regarded as more than usually tentative and subject to further inquiry.

Labor Force Participation, Employment, Group Membership, and High School Curriculum

The effects of group membership and curriculum in the high school were estimated by two sets of equations. These equations had two different dependent variables. One was a measure of labor force participation (percentage of time working or looking for work), the other a measure of employment. The equations were estimated using data from both NLS-Youth and HS&B. The latter data set contains more information about the school experience than the first. Therefore, its specification includes a greater number of independent variables.

The two pairs of equations are not exact replications, but consistency across samples and across specifications, when it does occur, is judged to provide strong support for the conclusions. The sign as vary in the average age of their respondents, in the fluctuations of the labor market cycles that they encompass, and in the method of selection. The NLS-Youth cohorts are, on average, about 5 years out of high school, whereas the HS&B respondents are slightly less than 2.



The labor force particiation equations took, as a dependent variable, the percentage of the weeks that each respondent had spent in the labor force out of the total number of weeks since graduation from high school. High school curriculum and special group membership are the explanatory variables of interest, and the control variables are those described in chapter 3. Table 14 presents the results.*

In the NLS-Youth equation, vocational Concentrators and Limited Concentrators both show greater percentages of time in the labor force than the comparison group--graduates of the general curriculum. Graduates of the academic curricul.m, on the other hand, show a smaller percentage of time in the labor force than their general counterparts. The HS&B results are similar. Although the coefficients are not identical, their signs and The differences observed between the two significance agree. databases are most likely the consequence of the limits placed on Specifically, a the variables in HS&B, but not in NLS-Youth. vocational education/training related job interaction term is included in the HS&B equation. The coefficients for the academic curriculum are within one percentage point of being identical in the two samples, even though the academic definition is slightly less stringent in the HS&B data. The reduced labor force participation for academic graduates is not explained by the intuitively obvious explanation of going on to postsecondary school. Postsecondary education is controlled in the estimation, by variables for both enrollment and completion.

Among the special groups, whe. the comparison group is white men, black mer have lower participation in the NLS-Youth This participation is reduced even more in the HS&B sample, and the Native American men also show reduced participation in that sample. The largest effects are for women, however. Here one observes that the differentials in labor force participation for women, compared with white men, are all negative and all significant, with one exception--for the white women in the HS&B sample. The difference for them is only 1 percentage point, An explanation may lie in the inclusion and is not significant. of a variable reflicting parenthood for women in the HS&B equation, but one must then conclude that children have less effect on labor force participation for nonwhite women than for white women. A ready explanation, either theoretical or intuitive, is not apparent.



^{*}Tables 14 through 28 show only the regression coefficients for the explanatory variables of primary interest. For the complete regression results, see appendix C, tables C14-C28.

TABLE 14

LABOR FORCE PARTICIPATION, EMPLOYMENT,
GROUP MEMBERSHIP, AND HIGH SCHOOL CURRICULUM

			_	of Time bor Force		Percentage of Weeks Worked						
	HS&B			NLS			HS&B			NL	.s	
	Par ameter Estimate	t-value	HS&B n	Par ameter Estimate	 t-value	NLS n	Parameter Estimate	t-value	HS&B n	Parameter Estimate	t-vaiue	NLS n
Education							<u>, </u>					
Concentrator	0.023	1.62	578	V.036*	2.87	608	0.006	0.53	518	0.041*	4.18	59
Limited Concentrator	0.018	1.54	900	0.023*	2.20	962	-0.011	-1.25	805	0.016	1.93	94
Concentrator/ Explorer	-0.012	-0.84	566	0.014	1.08	556	-0.011	-1.02	493	0.034*	3.43	5 4
Academ 1c	-0.043*	-3.01	616	-0.037*	-3.23	835	-0.006	-0.57	536	-0.007	-0.76	82
SR Vocational	0.030	1.74	474	0.001	0.09	314	0.001	0.07	420	0.025	1.87	29
SR Academic	0.008	0.31	137	0.017	1.28	605	-0.020	-0.98	125	0.016	1.51	5
Concentrator (TR)	0.096*	4.06	178				0.033*	1.96	176			
Limited Concentrator (TR)	0.115*	5:07	190				0.027	1.70	189			
Concentrator/ Explorer (TR)	0.064*	2.02	95				0.019	0.86	91			
Special Group												
Male												
Hispanic	-0.014	-0.86	444	0.005	0.31	423	0.010	0.81	394	-0.008	-0.67	41
Native American	-0.144*	-4.44	92	-0.025	-0.94	106	-0.022	-0.89	75	-0.018	-0.85	10
Black	-0.099*	-5.62	395	-0.048*	-3.56	723	-0.024	-1.80	337	-0.099*	-9.39	69
_ Other	-0.056*	-2.08	146	-0.005	-0.29	346	0.001	0.40	119	-0.003	-0.25	34
Female .			465	0.044	4 07			1.07	400	0.011	0.60	
Hispanic	-0.058*	-3.41	465	-0.061*	-4.07	515	-0.025*	-1.97	402	0.011	0.98	50
Native American	-0.181*	-4.95	72	-0.104*	-4.61	160	-0.005	-0.15	51	-0.059*	-3.32	15
Black	-0-126*	-7.71	533	-0.113*	-8.94	926	-0.046*	-3.66	418	-0.141*	-14.13	89
Wh I te	-0.014	-1.36	2005	-0.057*	-6.06	1811	-0.001	-0.09	182 4	-0.011	-1.50	178
Other	-0.053*	-2.03	158	-0.006	-0.36	363	-0.004	-0.22	136	0.022	1.74	35
Handicapped	-0.010	-0.77	710	0 0 CO#	4 47		0.006	0.6	619	0.000	0.70	7.0
Limited English Proficient	-0.036	-1.62	220	-0.068*	-4.43	337	-0.008	-0.43	182	-0.009	-0.78	32

NOTES: *Indicates that the chance probability of an effect this large is < .C All equations controlled for socioeconomic status, region, rural/urban location, achievement/ability, post—condary educ. In current enrollment, labor market experience, and tenure. In addition, the HS&B equations controlled for the presence of a spouse or child and occupation. SR refers to self-report, TR refers to training-related, MD refers to missing data.



		1	the La	e of Time bor Force		Percentage of Weeks Worked						
	HS&B Parameter		NLS		L <u>S</u>		HS&B				<u>.s</u>	
	Est Imate	t-value	HS&B n	Parameter Estimate	t-value	NLS n	Parameter Estimate	t-valu	е	Parameter Estimate	t-value	NLS n
Absenteeism	-0.001	-0.29	6088				0.007	1.46				
Discipline Problems	-0.047*	-3.85	761				0.003	1.16	5 40 4			
Trouble with Law	-0.019	-0.92	229				-0.011	-1.23	663			
Work Composite	0.011	1.87	6023				-0.023	-1.50	206			
8th Grade Aspirations	-0.007	-0.77	3132				0.001 0.003	0.19 0.46	5350 2789			
10th Grade Grade Point Average	0.020 *	3 • 16	5499	0.002	0.44	5631	0.012*	2.38	4899	0.012*	2.83	5533
Work in High School		14.57	5002				0.074#		45.40			
Self-esteem	0.003	0.47	6013	0.001	1.48	6676	0.034*	4.31	4549			
Locus of Control	0.011	1.68	6004	0.001	1.40	0070	0.011*	2.64	5337	0.003*	3.80	655 4
Intercept	0.394	11.29	6099	0.758	22.82	6954	-0.001	-0.19	5332			
·						————	0.843	32.19	5415	0.633	24.33	6810
	R ² =	0.127		R ² = () . 162		R ² =	0.069			0.126	
	Adj. R ² ≖	0.119		2	.157		Adj. R ² =			2		
F=0	statistic =	15 132	C							Adj. R ² ≖	0.121	
' '	, G: 131 C =	170172	r - \$	tatistic = 34	1.10		F-statistic =	6.839	F-	statistic =	2 4.963	

Except for the two anomalies—a negative differential for the academic curriculum and the one finding of no difference in labor force participation for majority white women—the results for curriculum and group membership are in the expected directions.

The equations for employment are considered next. The samples in both databases are limited in these analyses to those respondents who are in the labor force. The dependent variable is defined as the percentage of weeks in the labor force that the respondent was employed. It is expressed in this form to take into account the fact that the respondents have been in the labor force for differing periods of time. Being in the labor force means that the respondent either has a job or is without one and looking for work. It does not include the state of neither working or looking for work.

A vocational Concentrator will be working about 2 more weeks each year than a graduate of the general curriculum. This finding is supported in both databases, with the differing specifications described previously. The results are not consistently significant for the other levels of vocational participation in the high school. The academic curriculum provides neither an advantage nor a disadvantage in maintaining employment.

Among the groups of special interest, only black women show a consistently significant disadvantage in comparison to white males. Black men also show such a disadvantage in the NLS-Youth data, but not in HS&B. Likewise, Native American women in the NLS-Youth sample have a disadvantage that is not repeated among those in the other database. In contrast, Hispanic women have a disadvantage in the HS&B sample but not in NLS-Youth The signs for both black men and Native American men and women are all negative, however, suggesting the possibility the there may be a small, but consistent disadvantage for these groups. It does not, however, attain the magnitude that one might expect for these groups.

Recall that al. of the respondents in these analyses are high school graduates. This suggests that education may indeed serve to substantially offset inequality among the groups considered here. It also suggests that much of the disadvantage observed in simple tabulations without controls may obscure the real causes of the inequality (for example, poverty, lack of education). The next section further examines labor market outcomes in the form of wages and earnings.

Earnings Effects of Group Membership and High School Curriculum

The earnings effects were evaluated through estimating a set of equations in which the dependent variables were hourly rates



of pay and monthly earrings expressed in log form. These equations were estimate for two databases, three differing specifications, and with two different samples.

The two databases provided a replication of the analysis. Two specifications were estimated to permit testing of alternative controls for selection into the different patterns of vocational curriculum. The third specification came about because not all independent or explanatory variables were available in both databases.

Further, the assumption of additivity of the model was tested by including interaction terms in an additional set of equations. With one exception, discussed subsequently, none of the interaction terms was significant.

The two samples included those who were employed full time and all workers, whether full-time or not. In this latter equation, a variable for hours worked picked up the effect of part-time employment when the dependent variable was hourly wages. For monthly earnings, a dummy variable for enrollment in postsecondary education served as a proxy for the likelihood of part-time work.

All Workers and Full-Time Workers

Table 15 shows the results for the variables of interest for full-time workers in both databases. This table and companion table 16 for all workers gives the overall picture of the earnings effects for both the high school curriculum and for special group membership. Because changes in specification and different samples are expected to result in changes in the coefficients, consistency across these conditions indicates robustness of the findings.

The highlights of the tables are as follows. For vocational Concentrators in training-related employment, there is a consistent advantage in hourly wages and monthly earnings across specifications and databases. The comparison group is those who followed a general curriculum in high school. The hourly wage advantage ranges from 7 percent for NLS Youth to 11 percent for HS&B. The monthly earnings advantage ranges from 7 percent for NLS Youth to 10 percent for HS&B. Under no specification or sample condition does graduation from the academic curriculum produce an earnings advantage, nor does receiving training in vocational education but working in a job not trained for.

In the HS&B data alone, training-related jobs for both Limited Concentrators and Concentrator/Explorers show an hourly and monthly advantage of the same magnitude as that for the Concentrator. This finding holds for both HS&B specifications, but is not replicated for the NLS cohorts.



TABLE 15

EFFECTS OF HIGH SCHOOL CURRICULUM AND GROUP MEMBERSHIP ON HOURLY AND MONTHLY EARNINGS (All respondents, Full-time workers)

		HS&B			_	H548					MLS	<u>i</u>		
	Hour	ly	Mont	hly	Hour	ly	Mont	hly		Hour Par men un	<u>ly</u>	Mont Par ameter	hly	NLS
	Paramoter Estimete	— t~value	Par amoter Estimate	t-val ue	Par ameter Estimate	t-val uo	Par amotor Estimate	t-value	HSLB n	Estimate	t-val us	Estimate	t-val us	n
Education														
Concen trator	-0.004	-0.23	-0.009	-0.46	-0.005	-1.26	~0.010	-0.51	445	-0.617	-0.69	-0.023	-0.89	266
Concentrator	-0.017	-1.03	-0.007	-0.37	-0.017	-1.05	-0.007	-0.40	61 5	-0.014	-0. 66	-0.01/	-0.82	441
Concentrator											0-11	0.000	0.00	255
Concentrator/	-0.001	-0.07	-0.005	-0.24	-0.002	-0.12	-0.0 06	-0.27	408	C.303	0-11	0.000	0.00	2,,
Explorer					-0.007	-0.34	-0.019	-0.79	322	-0.027	-0.35	-0.018	-0.83	471
Academ Ic	-0.007	-0.34	-0.019	-0.80 1.76	0.007	2.21	0.019	1.74	353	0.039	1.31	9.035	1.13	188
SR Voca*ional	0.0 52*	2.23	0.044		0.051	0.36	0.027	0.62	83	0.038	1.61	0.930	1.20	350
SR Academic	0.014	0.35	0.025	C-58	0.014	4.04	0.027	3.27	181	0.067*	2.21	0.074*	2.33	171
Concentrator (TR)	0.110*	3.96	0.096*	3.22	0.132	4.41	0-110	3.77	184	0.031	1.05	0.020	0.64	182
Limited .	0.120	4.42	0.113	3.85	0-120"	4.41	0.110	3.11	104	0.05.				
Concentrator (TR)					0.107	2.90	0.094*	2.39	94	G-019	-∪.47	-0.030	-0.71	86
Concentrator/	0.106*	2.87	0.094*	2.36	0.107	2.90	0.034	2.77	~	0-012	• • • • • • • • • • • • • • • • • • • •			
Explorer (TR)														
Special Group														
Male												0.015	0.55	.77
HI scanic	0.031	1.46	0.012	0- 52	0-027	1.29	0.008	0.38	393	0.023	0-84	0.019	0.62	۶۰.
Native American	-0.064	-1.46	-0.073	-1.55	-0.063	-1.44	~0. 073	-1-56	67	0.015	0.35	-0.029 -0.025	-1.00	415
Black	-0.006	-0.26	-0.009	-0.36	-0.001	-0. 05	-0.005	-0-20	282	-0.002	-0 10		-C-35	2.
Other	-0-015	-0.37	-0.042	-0.94	-0.017	-0.42	-0.044	-0.99	78	- ∂•016	-0.60	-0.010	-(-)7	2:
Female								- 44		-0.1148	-4 43	-0.161*	-6.04	319
Hispanic	-0.054*	- 2.13	-0.084*	-3.09	-0-056*	-2.22	-0.084*	-3-11	232	-0.114*		-0.186*	-0.0 4	102
Native /merican	-0.084	-1.52	-0.110	-1 - 84	-0.089	-1.61	-0.114	-1 .92	41	-0.136*	−5.50 −5.49	+5, ; 81*	-7.44	437
Black	-0.063*	-2.32	-0.101*	-3.45	-0.061*	- 2.27	-0.098*	-3.36	238	-0.129*			-13.6L	1059
Whilte	-0.091*	-5.84	-0.125°	-7.47	-0.092*	-5.88	-0-124°	-7.40	1324	-0.186*	-11.33	-0.231*	~7.30	204
Other	-0-020	-0.44	-0.035	-0.73	-0.030	-0.66	-0.045	-0-92	66	~ ∪.179*	-6.25	-0.217*	-7.30	204
Hand Capped	-0.036*	-2 17	-0.029	-1.63	-0.036*	-2.14	-0.031	-1.71	498			0.011	2,36	179
Limited English	0.015	0.49	0.023	0-67	0.014	0.46	0.022	0.64	141	0.018	0.61	0.011	J. 70	1/9
Proficient														

NOTES: *Indicates that the chance probability of an effect this large is < .05. All equations controlled for socioeconomic status, region, rural/urban location, aclievement/ability, postsecondary education, current enrollment, labor mailet experience, and tenure. In addition, the HS&B equations controlled for the presence of a spouse or child and occupation. SR refers to self-report, IR refers to training-related, MD refers to missing data.



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TABLE 15-Continued

			HS	<u>28</u>			ţ	ISAB				NL	<u>s</u>		
		<u>Hour</u> Pair also fair	·iy	Mor Par ane ter	thly	<u>Hour</u> Par ame ter	·l <u>y</u>	Parameter Fattmate	thly		Hour	·ly	Mon1	th I y	
		Estimate	t~ value		t-val ue		t~val us	Est imate	t⊷ /al ue	HS&B n	Parameter Est Imate	t~value	Parameter Estimate	t~val ue	NLS n
	Selection Proxles														
	Absenteelsm Discipline Problem Trouble with Law Work Composite 8th=Grade Aspirations	0.008 0.003	1.02 0.21	0.009 0.001	1.09 0.06	0.013° -0.009 0.037 0.010 0.001	3.15 -0.55 1.44 1.25 0.05	0.013* -0.004 0.060* 0.012 -0.001	2.94 =0.21 2.19 1.38 =0.05	4296 630 206 4251 1978					
	10th-Grade Grade Poir* Aver	0-004	0.40	0.009	1.00	D.008	دد.ن	0.015	1.58	3907	~ ∪.005	-0.52	-0.008	-0.82	3475
رح ح	Kurk in High Schol Enjoy Work Luck More Imported Than Work	0.017 0.015	1.0° 1-30 18	0.033 0.013 0.035	1.87 1.04 1.71	0.019	1.13	0.034	1.86	3763 1801 627					
N	Work Important Plan to Work Firs Year Out of High School	0.009 0.016	0-47 1-37	0.0 0 1 0.013	0.06 1.02					401 2517					
	Self-esteem	0.011 C.002	1.38	0.016 0.001	1.94 0.13	0.012 -0.009	1.59 -0. 97	0.018* -7.008	2.18 -0. 77	4245 4240	0.006*	4.06	0.007*	4.60	4137
	Intercapt	1.382	27.65	6.564	121.98	1.378	27.45	-547	121.24	4301	1.088	15.66	6.081	99,29	4253
	F٠	R ² = 0 Adj. R ² = 0 statistic = 8	.118	Adj• ≟=	0.167 0.152 11.583	R ² = (Adj. p ² =) F-statistic = :		R ² = Adj. R ² = F-statistic = 1			R ² = Aij · R ² = Festatistic = 1		R Adj. R F-statistic		



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TABLE 16

EFFECTS OF HIGH SCHOOL CURRICULUM AND
GROUP MEMBERSHIP ON HOURLY AND MONTHLY EARNINGS
(All respondents, All workers)

		<u>нѕ&В</u>				HS&B					NLS	<u>i</u>		
	Hour	<u>ly</u>	Mont	<u>hly</u>	Hour	<u>ly</u>	Mont	hly		Hour	14	Mont	hl.	
	Per ameter Estimate	t∽val ue	Par and ter Estimate	t-val us	Parameter Estimate	t~value	Par amoto: Estimate	t-val ue	H S&B n	Par amoter Estimate	t-val ue	Par amoter Est in a to	t-val us	NLS n
ducation														
Concen trator	0.008	0.49	0.058*	2.25	0.010	0.61	0.060*	2.33	615	-0.023	-1.31	-0.014	-0.44	371
.Im I *ed	0.002	0-17	0.001	0-05	0.003	0.24	0-003	0-12	93 3	-0.010	-0.59	-0.026	-0. 99	641
Concen trator														
Concentrator/	-0.004	-0. 26	0.02.	0.93	-0.003	-9.17	0.026	1.01	61 2	0.023	1.10	-0.001	-0.02	378
Explorer													-1.46	;2
cadem Ic	-0-012	-0.7	-0.045	-1.69	-0.012	-0.67	-0.044	-1.63	608	-0.006	-0.35	-0.038	0.67	256
R Vocational	0.036	1.76	0.032	1.03	0.038	1.86	0.034	1.09	479	0.018 0.022	0.68	0.026 0.035	1.14	51 2
R Academic	0.028	0.85	0.018	0.36	0.328	0.86	0.019	0.38	141	0.022	1.08 2.85	0.039	3.98	196
Concentrator (TR)	0-099*	3.77	0.098*	2.44	0.103*	3.94	0.102*	2.55	221		1.97	0.082*	2.03	22
Smilted Concentrator (TR)	0.085*	3.37	0.101*	2.62	0-087*	3.44	0• 1 00*	2.58	2.33	0.C53*				
Concentitator/	0.090*	2.57	0.108*	2.01	0-094*	2.68	0.1093	2.04	114	0.003	0.07	0 049	0.84	103
Explorer (TR)														
Special Group														
Male												-0.015	-0.41	373
Pf spenic	0.034	1.79	0.007	0.23	0.029	1.52	-0.001	-0.03	508	0.019	0.80	-0.015	=0.41 =0.06	37: 96
Notive American	-0-050	-1.18	~0.075	-1.16	-0.053	-1.24	-0.085	-1.30	78	0.020	0.49	-0.004 -0.025	-0.06 -0.80	56°
Black	J.029	1.37	-0.039	-1.20	0.029	1.36	-0.042	-1 - 29	389	0.002	0.09		-1.02	70 31
Other	-0-012	-0.33	-0.063	-1.17	-0.014	-0.38	-0.072	-1.34	120	-0.033	-1.42	-0.036	-1.02	31.
Female												-0.174*	-5.20	45
Hispanic	-0.044*	-2.06	-0.139*	-4.21	-0.047*	-2.21	-0.145*	-4.40	450	-0.083*	-3.74	-0.258	-5.05	14
Native American	-0.104*	-2.25	-0. 186*	-2.61	-0.117	-2.52	-0.199°	-2.60	66	-0.143*	-4.24		-8.1i	68
Black	-0-024	-1 •08	-0. 186*	-5.46	-0.025	-1.12	-0.187*	-5.48	413	-0.092*	-4.70	-0.239* -0.281*	-0.11 -13.42	159
Wh I te	-0.084*	-6.39	-0 • 190*	-9 . 37	-0.085*	-6.46	-0.190*	-9. 36	2191	-0.147*	-10.50	-0.281 -0.274*	-7.84	33
Other	-0.008	-0.24	-0.161*	-3.09	-0.013	-0.39	-0.169*	-3.25	138	-0.131*	-5.66	-0.2/4"	-7.04))
landic apped	-0.021	•1.44	-0. 027	- 1 .18	-0.022	-1 . 46	-0.030	-1 . 32	697			-0.001	-0.03	24
Limited English Proficient	0.027	0.99	0.035	(• 82	€ 024	0.87	0.030	0.71	204	0.008	0.32	~0. 001	~U. U5	24

NOTES: "indicates that the chance probability of an effect this large is < .05. All equations controlled for socioeconomic status, region, rural/urban location, achievement/ability, postsecondary education, current enrollment, labor market experience, and tenure. In addition, the HS&B equations controlled for the presence of a spouse or casis and occupation. SR raters to self-report, TR refers to training-related, MD refers to missing data.



		<u>H</u>	SAB			<u>H</u>	SAB				NL:	<u>s</u>		
	Hour Par ame ter	<u>rly</u>	Mon Par ameter	thly	Hour Par ane ter	-ly	Mont Par ann fer	thly	HS&B	Hour Par anoter	<u>1y</u>	<u>Mont</u> Par amoter	hly	
	Estimate	t~val u		t-value	Estimate	t-value	Est ¹ ate	t~val ue	пэмэ	Estimate	t-val us	Est late re	t~val ue	NLS n
Selection Proxies								-	<u>.</u>					
Absentee1 sm					0.015*	4.05	0-020*	3.49	6377					
Discipline Problems					0-203	0- 19	-0.007	-0.31	83.3					
Trouble with Law					0.014	0.56	0.066	1.79	254					
Work Composite	0.010	1.38	0.031	2.85	0-011	1.58	0.033*	3.08	6311					
8th-Grade Aspirations	0-004	0-40	0.009	0.54	0.001	0-11	0.005	0.28	3247					
10th-Grade	~0.010	-1.27	-0.030*	-2.53	-0.006	-0.75	-0.025*	+2.13	5837	-0.007	-0.82	-0.024	-1.91	4948
Grade Point Averag	•,						*****			•	•••			1310
Work in High School		1.27	0.079*	3.71	0-019	1.38	0-081*	3.81	5529					
Enjoy Work	0.018	1.83	0.040	2.64					2564					
Work important	0.01B	1.02	0.016	0.59					518					
Plan to Work F "st Year Out of High School	0-012	1.26	0.010	0.66					4026					
Sel f-esterm	0.009	1.44	0.020	2.01	0.009	1.39	0.020*	2.01	6299	0.005*	3.87	0.008*	3.98	5885
Locus of Control	-0.002	-0.20	0.011	0-88	-0.003	-0.37	0.009	0.75	6293	0.009	3.07	0.000	2090	2002
Intercept	1.477	34.08	6-680	100-31	1.451	32.75	6.643	97.68	6384	0.818	15.69	5.696	75.16	6054
		<u></u>												
	a²•	0.103	R ² ₌	0-232	R ² =	0.104	R ² ₌	0-233		₽ ² ₌	0.275	8	2= 0.336	
	_	0.093	_	0.223	Adj. R2=	0.094	_	0.225		_	0.269	Adj. R		
r	-		-		-		-			-				
1 **	tatistic = 1	U. 276	F-statistic = 2	70°92A	Festatistic =	10.363	F-statistic = 2	7.032		F-statistic =	51.731	F-statistic	= 70.582	

For the special groups, some strikingly unexpected findings can be observed. Recall that the reference group for these equations is the white male group. For Hispanic, Native American, black, and other men, there is no significant earnings disadvantage, other things being equal. Except for black men and the residual category, others, the signs are not even consistently in the expected direction. The results are more like those expected for women, but still contain some surprises. All signs are negai've for the female groups, suggesting significant disadvantage in both wages and monthly earnings across all specifications and There are too few cases of Native American and databases. "other" women for the observed effects to be reliable indicators for their respective populations. Hispanic women, however, show the least disadvantage and white women the greatest. Given the recent Census Bureau report (Current Population Reports, March 1985b) howing average family incomes of \$27,690 for majority whites, \$18,830 for Hispanics, and \$15,430 for blacks, one would not expect a finding of no difference for men and the smallest difference for women these two Hispanic groups are compared with majority white men. Possible explanations will be presented in the discussion of the results.

The handicapped group could not be adequately identified in the NLS-Youth database. The results for this group are, therefore, confined to the two specifications applied to the HS&B For , ese responder's, a handicapping condition is associated with a quantage of approximately 4 percent in hourly wages, but is not present in a statistically reliable way for monthly earnings. The values are identical to the urth decimal place for both specifications for the wage equations. Limited English proficiency, on the other hand, does not appear to have an effect on wages or earnings among respondents in either data-Recall that all of the respondents in the sample analyzed with these equations are high school graduates. Even though they expressed difficulty in getting a job or requested that the questionnaire or interview be administered in a language other than English, if they are employed there is no observable earnings disadvantage. Completing high school seems to have a profound significance for these young people.

When the sample is expanded to include those who are working part-time, (table 16) some additional findings are observed. The advantage shown for the training-related employment of Limited Concentrators is now confirmed in both databases. Also, Concentrators who were not working in training related jobs now show an advantage in monthly earnings in the HS&B data. The disadvantage for black women in hourly wages no longer holds in ES&B, and the disadvantage for Native American women becomes significant, and sometimes exceeds that of majority white women. The disadvantage of a handicapping condition is reduced on the average in this sample sufficiently to become an unteliable estimate of the population, although the results continue to be in the direction of a disadvantage.



Separate specifications were also estimated to determine whether there were significant interactions between high school curriculum and postsecondary participation or between race/ethnicity and postsecondary participation that were associated with wages. No interactions were significant for high school curriculum, but some were for race/ethnicity and postsecondary participation. Specifically, the evidence suggests that a 4-year degree has a greater positive impact for black men, Hispanic women, and majority white women than for majority white men. Conversely, the impact appears to be sharply less for other men. This finding does not, however, suggest that the basic conclusions about vocational education should be altered.

Earnings Effects of High School Curriculum for Hispanics

The results for Hispanic men and women are shown in tables 17 and 18. The clear findings that emerged in the equations estimated for all respondents are much less evident when the sample is limited to Hispanics only. The coefficients remain positive for Concentrators and Limited Concentrators, but are not of sufficient size to reliably represent the population. may be largely due to the reduced number of Concentrators and Limited Concentrators (22-28 cases). Although these results must be replicated before conclusions are drawn from them, they are in the direction of positive effects for the vocational curriculum in the high school. In fact, the single curriculum coefficient that is significant is for the academic curriculum. It indicates a 14 percent disadvantage in hourly wages for graduates of this curriculum.

Gender has an effect in this sample that may be even hore promoted than for all women. There is a 10-17 percent distadvantage in both hourly wages and monthly earnings for Hispanic women when compared with Hispanic men.

When the sample is expanded to include all workers, training related employment for Concentrators shows a significant advantage for monthly wages in the PS&B database, but not in NLS-Youth. The academic disadvantage also occurs in this sample for both hourly and monthly earnings, both in NLS-Youth. The earnings disadvantage for Hispanic women continues to be demonstrated in this larger sample.

There are two other interesting findings that have implications for school policy that are noted in both samples. The work composite score, available in HS&B, is positively associated with wages and earnings. It is made up of several items that allow the respondent to express a general interest or orientation toward work. The second item, a self-esteem score, has a strong



TABLE 17

EFFECTS OF HIGH SCHOOL CURRICULUM AND

GROUP MEMBERSHIP ON HOURLY AND MONTHLY EARNINGS

(Hispanics, Full-time workers)

		45&B	•				<u> </u>	LS		
	Hour	<u>1y</u>	Mont	<u>h i y</u>			Hourly	Mont	<u>hly</u>	WI C
	Par ameter Estimate	t~val ue	Par ameter Estimate	t~value	HS&B n	Par ameter Estimate	t-val ue	Parameter Estimate	t∽va! ue	NLS n
Education										
Col entrator	0.005	0.10	0.003	0.05	62	-0.056	-0.86	-0.066	- 0.98	33
Limited Concentrator	-0.045	-1 - 17	-0.031	-0.77	105	0.002	0.04	- 0.021	-0. 39	61
Concentrator/ Explorer	-0. 064	-1.28	- 0.062	- 1.18	53	0.016	0.25	0.012	0.19	37
Academ 1c	0.077	1.20	0.060	0.89	32	-0.142*	- 2.13	-0.133	- 1 •94	39
SR Vocational	0.068	1.15	0.061	0.98	57	0.082	1.20	0.080	1.14	33
SR Academ Ic					11	0.010	0.18	-0. 004	-0. 07	49
Concentrator (TR)	0.082	1.22	0.094	1.33	28				_	22 27
Limited Concentrator (TR)					24	0.043	0.60	0.027	0.37	
Concentrator/ Explorer (TR)					23					13
Special Group										
Female Handicapped	-0.095* -0.031	-3.03 -0.80	-0.105* -0.029	-3.17 -0.70	282 89	~0.133*	-4.42	- 0.167*	-5.52	319
Limited English Proficient	0.000	0.01	0.008	0.21	106	0.017	0.34	0.026	0.50	57

NOTES: *Indicates that the chance probability of an effect this large is \leq .05. All equations controlled for socioeconomic status, region, rural/urban location, achievement/ability, postsecondary education, current enrollment, labor market experience, and tenure. In addition, the HS&B equations controlled for the precence of a spouse or child and accupation. SR refers to self-report, TR refers to training-related, MD refers to missing data.



		<u> HS</u>	S&B					NLS		
	Hour Par ame ter	·ly	Mont Par ameter	<u>hly</u>	HS&B		Hour ly	Mont Par arreter	nly	Alt
	Estimate	t~value		t-value	n	Parameter Estimate	t-value		t-value	NL n
Absenteelsm	0.020*	1.98	0.013	1.17	675					
Discipline Problems	0.005	0.15	0.027	0.74	124					
Trouble with Law	0.014	0.26	0.042	0.72	46					
Work Composite	0.038*	2.00	0.045*	2.27	668					
8th=Grade	0.021	0.71	0.029	0.93	292					
Aspirations			0.023	0.33	232					
10th-Grade	0.017	0.83	0.016	0.75	606	-0.° +	-0.89	-0.020	-1.01	4-
Grade Point Average	1		2.0.0	0.75	000	-0.()	-0.69	- 0.028	-1.01	47
Work in High School	-0.006	-0.16	0.013	0.33	577					
Self-esteem	0.000	0.01	-0.007	-0.37	667	0.009*	2.40	0.0114	2 67	E C
Locus of Control	-0.007	-0.34	-0.022	-0.99	667	0.009	2.40	0•011*	2•67	59
Intercept	1.540	13.85	6.666	56.61	675	1 177	c 00		70 47	
						1.137	6•03 ———	6•008 	38.43 	5 9
	R ² = 0	• 186	R ² ≠	0•201		_p 2_	0.351	_R ²=	0.355	
	Adj. R ² = 0.113		•	0.129		Adj• R ² =		Adj. R ² =		
F+	-		-			_		_		
F=ST	atistic = 2	• 526	F=statistic =	2.783		Festatistic = 1	10.952	Festatistic =	11.600	

TABLE 18

EFFECTS OF HIGH SCHOOL CURRICULUM AND
GROUP MEMBERSHIP ON HOURLY AND MONTHLY EARNINGS
(Hispanics, All workers)

		HS&B					<u> </u>	<u>ILS</u>		
	Hour	<u>.1 y</u>	Mont	hly	11000		Hourly	Mont Parameter	hly	NLS
	Parameter Estimats	t=val ue	Par ameter Estimate	t-val ue	HS&B n	Parameter Estimate	t-value	Estimate	t-val ue	n n
£.ducation										
Concentrator	0.001	0.03	0.018	0.28	87	-0.063	-1-12	-0.043	- 0.50	46
Limited Concentrator	0.013	0.38	0.036	0.70	1 49	0.004	0•09	-0. 040	-0.5 9	82
Concentrator/ Explorer	-0. 068	- 1.55	-0.071	-1.10	83	0.015	0.28	-0.024	-0.3 0	53
Academic	^.078	1.39	0.092	1.12	51	-0.1 261	- 2.50	-0.305*	- 4.02	70
SR Vocational	0.046	98.0	0.034	0.45	78	0.049	0.82	-0.022	- 0.25	45
SR Academic		4 70	0.010#		19	-0 .011	-0. 22	0.058	0.76	64 24
Concentrator (TR)	0.112	1.70	0.212*	2.20	34	0.047	0.71	0.076	0.77	32 32
Limited Concentrator (IR)	0.052	0:74	0.098	0.95	29	0.047	0.71	0.076	0.77	32
Concent: ator/ Explorer (TR)	0.199*	2.66	0.262*	2.40	25					19
Special Group										
Female	-0.105*	-3. 75	-0.168*	-4.09	450	-0.092*	- 3.59	-0.145*	-3.78	455
Handi capped	-0.000	-0. 01	-0.041	- 0•76	116					
Limited English Proficient	-0.024	-0.72	0.026	0.53	150	0.015	0.34	0.057	0.87	77

NOTES: *indicates that the chance probability of an effect this large is \leq .05. All equations controlled for socioeconomic status, region, rural/urban location, achievement/ability, postsecondary education, current enrollment, labor market experience, and tenure. In addition, the HS&B equations controlled for the presence of a spouse or child and occupation. SR refers to self-report, TR refers to training-related, MD refers to missing data.



TABLE 18—Continued

		<u>H</u> 9	<u>888</u>					NLS		
	<u>Hour</u> Par ameter	<u>ly</u>	Mont Parameter	<u>th I y</u>	HS&B	Par ameter	Hourly	Mont Parameter	hly	NLS
	Estimat s	t-value	Estimate	t-value	n	Estimate	t-value	Estimate	t-val ue	'n
Absentee! sn	0.021*	2.25	0.019*	1.37	958					
Discipline Problems	-0.012	-0.36	0.010	0.20	154					
Trouble with Law	0.042	-0.77	0.108	1.35	52					
Work Composite	0.000	0.03	0.049	1.94	947					
8th-Grade	0.021	Ú.76	0.020	0.50	453					
Aspirations	***	31.3	0.020	04.70	490					
1 Of h=Grade	-0.011	-0.57	-0.016	-0.58	865	-0.010	-0.44	0.047		
Grade Point Average		0.57	0.010	-0.50	805	-0.010	-0.44	- 0.047	-1.3 9	660
Work in High School	-0.006	-0.18	0.070	1.45	809					
Self-esteem	0,002	0.10	0.070	0.27	945	0.007*	2 00	0.000	1 40	00.0
Locus of Control	0.013	0.69	-0.003	-0.10	945	0.007	2.00	0.008	1.49	828
Intercept	1.635	15.46	6.614	42.67	958	0.751	5.64	E 774	20 07	~~
								5.734 	29•87 	828
	$R^2 = 0$		R ² =			R ² =	0.340	R ² =	0.382	
	Adj. R ² = 0	•094	Adj - R ² =	0.187		Adj. R ² =		Adj. R ² =		
F=s	tatistic = 2	-540	F=statistic =			=		-		
. 3			1 -310113110 -	4047		F-statistic = '	14.0/9	F - statistic =	18.526	

association with earnings in the NLS-Youth data, but not in HS&B. The self-esteem scale is much shorter in HS&B, and therefore less reliable. This may account for its failure to be significant in that sample.

Earnings Effects of High School Curriculum for Blacks

The number of working blac, among the respondents in the two databases is too small to draw reliable conclusions from this study about the effects of high school curriculum on earnings. The results are shown in tables 19 and 20. Two suggestions emerge from the data, but they should be regarded as only that, and not conclusions. Recall that the analysis of the choice of curriculum showed that being black was associated with a greater likelihood of being in the academic curriculum. Among both full-time workers and all workers, the percentage differential in earnings associated with that curriculum is uniformly small as compared with the general curriculum and both positive and Further, earnings are uniformly smaller than those associated with the vocational curriculum, either self-report or identified by transcripts. The percents associated with the vocational curriculum are within the same range as those that were found to be significant with larger sample sizes. (See, for example, the percents in the all workers equation, table 16.) This suggests that the vocational curriculum may be associated with an advantage in earnings. The second suggestion relates to the way in which the academic curriculum may have an effect. blacks with a 4-year degree, the percent advantage is 20 or greater. (See table C.19 in appendix C.) Thus, the effect of the academic curriculum may be limited to providing an advantage only for those who go on to complete a 4-year degree.

The effects of gender show the same persistent pattern observed in other groups. Being female is associated with a strong wage and earnings disadvantage. Of the eight coefficients, all are negative and only one does not equal or exceed the selected level of significance. None of the results for a handicapping condition or for limited English proficiency are of sufficient size to support conclusions. Moreover, they are both positive and negative, therefore suggesting no trends or tendencies.

In summary, curriculum, as presently practiced, does not seem to be the problem nor the solution for improving earnings for blacks. The problems rather seem to be in dropping cut, (table C.29 in appendix C) in finding work, and in eliminating the persistent disadvantage for women.



TABLE 19

EFFECTS OF HIGH SCHOOL CURRICULUM AND

CROUP MEMBERSHIP ON HOURLY AND MONTHLY EARNINGS (Blucks, Full-time workers)

		<u>H\$&B</u>					<u> </u>	ILS		
	Hour Par ameter	<u>ly</u>	Mont Par ameter	<u>th l y</u>	н ѕ& В	Dan ama Asin '	Hour ly	Mont	<u>h l y</u>	
	Estimate	t-value	Estimate	t-value	n n	Parameter Estimate	t-value	Par ameter Estimate	t-value	NLS n
Education										
Concentrator	-0.103	-1.83	-0.074	-1.22	49	-0.003	-0.06	-0.022	-0.40	45
Limited Concentrator	-0.070	-1 -46	-0.031	-0.60	75	-0.003	-0.07	0.003	0.40	86
Concentrator/ Explorer	-0.022	-0.41	-0.015	-0.25	55	0.029	0.56	-0.007	-0.13	49
Academic SR Vocational	0.001 0.001	0.01 0.02	0.021 -0.013	0•25 - 0•19	26 47	0.058 0.119*	1 • 26 2 • 28	0.012	0.24	71
SR Academic Concentrator (TR)			*****	0017	15 15	-0.001 0.097	-0.02 1.48	0.093 -0.017	1.70 -0.37	52 86
Limited Concentrator (TR)					22	J. 069	1.13	0.081 0.042	1.17 0.65	29 34
Concentrator/ Explorer (TR)					13					17
Special Group										
Female Handicapped	-0.072 -0.006	-1.96 -0.13	-0.104* 0.018	-2.64 0.35	233 69	-0.126*	-5.25	-0.159*	-6.33	437
Limited English Proficient					0	0.120	0.33	-0.006	0•09	33

NOTES: *Indicates that the chance probability of an effect this large is \leq .05. All equations controlled for socioeconomic status, region, rural/urban location, achievement/ability, postsecondary education, current enrollment, labor market experience, and tenure. In addition, the HS&B equations controlled for the presence of a spouse or child and occupation. SR refers to self-report, TR refers to training-related, MD refers to missing data.



TABLE 19--Continued

		HS	<u>88</u>					NLS		
	Hour Par ameter	<u>ly</u>	<u>Mont</u> Par ameter	<u>h ly</u>	HSå B	Par ameter	Hour ly	Mont Par ameter	hly	NLS
	Estimate	t-value	Estimate	t-value	n 	Estimate	t-valu∈		t-value	n
Absenteel sm	-0.001	-0.09	-0.000	-0.00	520					
Discipline Problems Trouble with Law	0.016	0.38	0.048	1.04	91 15					
Work Composite	-0.004	-0.16	-0.005	-0.18	509					
8th-Grade Aspirations	0.033	0.90	0.019	0.47	258					
1 Oth-Grade Grade Point Average	0.042	1.69	0.049	1.84	456	-0.016	-0.80	-0.024	-1.14	658
Work in High School	-0.015	-0.40	-0.006	-0.14	407					
Self-esteem	0.019	0.85	0.034	1.44	508	0.006	1.89	0.008*	2.27	847
Locus of Control	-0.029	-1.19	-0.008	-0.30	507					
Intercept	1.323	9.65	6•416	43.42	520	0•971	6•71	6• 094	48.58	84
	R ² = 0	•225	_R 2 ₌	0.252		R ² =	0.313	_R 2=	0.300	
	Adj. R2= 0		Adj. R ² =			^	0.289	Adj • R ² =		
F=st	atistic = 2	.313	F-statistic =	2.684		F-statistic =	13.304	F-statistic =	13.007	

EFFECTS OF HIGH SCHOOL CURRICULUM AND GROUP MEMBERSHIP ON HOURLY AND MONTHLY EARNINGS

(Blacks, All workers)

TABLE 20

		HS&B					<u> </u>	<u>ILS</u>		
	Hour	<u>ly</u>	Mont	<u>hly</u>			Hourly	<u>Mont</u>	hly	
	Par ameter Estimate	† -value	Par ameter Estimate	t-value	H\$&B n	Par aneter Estimate	t-value	Par ameter Estimate	t-value	NLS n
Education			-							
Concentrator	-0.042	-0.77	0.055	0.74	7 5	-0.035	-0.73	-0.005	-0.06	64
Limited Concentrator	0.007	0.16	-0.034	- 0.56	1 22	0.024	0.68	0.016	0.29	133
Concentrator/ Explorer	0.029	0.55	-0.011	-0. 16	83	0.046	1.06	-0.032	-0.47	75
Academic	-0.016	-0.24	-0.008	-0.08	48	0.019	0.50	-0.038	- 0.65	1 18
SR Vocational	-0.014	-0.23	-0.021	-0.25	68	0.063	1.39	0.069	0.96	74
SR Academic					19	- 0.013	-0. 36	0.024	0.42	139
Concentrator (TR)					23	0.066	1.06	0.122	1.25	34
Limited Concentrator (TR)	-0.015	- 0•19	0.015	0.14	29	0.076	1.40	0.057	0.67	4 (
Concentrator/ Explorer (TR)					16					20
Special Group										
Female Handicapped	-0.056 -0.033	-1.60 -0.71	-0.154* -0.016	-3.26 -0.26	413 96	-0.092*	-4.46	-0.210*	-6.51	689
Limited English Proficient	. •			- 12	ō	-0.048	-0.94	-0.054	- 0.66	48

NOTES: *Indicates that the chance probability of an effect this large is \leq .05. All equations controlled for ∞ cloeconomic status, region, rural/urban location, achievement/ability, postsecondary education, current enrollment, labor market experience, and tenure. In addition, the HS&B equations controlled for the presence of a spouse or child and occupation. SR refers to self-report, TR refers to training-related, MD refers to missing data.



		нs	<u>&B</u>					NLS		
		Hourly Par ameter		<u>h l y</u>	нѕ&в	Par ameter	Hour ly	<u>Mont</u> Par ameter	hiy	NLS
	Estimate	t-value	Par amoter Estimate	t-value	n	Estimate	t-vaiue	Estimate	t-value	n
Absenteet sm	0.020	1.65	0.020	1.21	802		_			
Discipline Problems		-0.01	-0. 016	-0.28	129					
Trouble with Law	-0.026	-0.26	-0.001	-0.01	19					
Work Composite	-0.010	-0.43	0.001	0.03	789					
8th-Grade Aspirations	0.009	0.24	0.014	0.30	424					
1 Oth-Grade Grade Point Avera	0.037	1.55	0.008	0.25	709	-0.004	-0.22	-0.009	-0.32	959
Work in High Schoo		-0.15	0.031	0.63	622					
Self-es teem	0.022	1.03	0.043	1.47	786	0.004	1.59	0.010*	2.33	1 252
Locus of Control	-0.068	-2.88	-0.006	-0.20	785					4.056
intercept	1.457	11.00	6.512	36.12	802	0.845	8.07	5.606 	35.05 	1 252
	R ² = (121	p ² =	0.279		R ² ≖	0.260	R ² =	. 0.318	
						Adj. R ² =		Adj. R ² =	- 0.303	
	Adj. R ² = 0		Adj. R ² ≖			•		•		
F-:	statistic = 1	1 .7 36	F-statistic =	4.871		F-statistic =	15.311	F-statistic :	- 21-165	

Earnings Effects of High School Curriculum for Females

Table 21 presents the wages and earnings results for all female workers. In this instance the comparison group is majority white women. Variation in specification reflects differences in data available in the two databases.

The findings again show an earnings advantage for Vocational Concentrators who are in training related placement. An earnings advantage is not apparent for this group for Limited Concentrators and Concentrator/Explorers. However, in the IS&B database, Concentrators who are working but not in training related placement show both a wage and monthly earnings advantage.

Among the special groups, the earnings advantage for the Hispanic women suggested by the all-respondents equations is confirmed in the NLS Youth data. Although the signs are positive, those sampled in HS&B do not show a sufficient advantage to be considered significant. Black women, on the other hand, have an hourly wage advantage in both databases. Neither handicapped nor limited English-proficient respondents show a consistent and reliable pattern in either direction.

When the sample is limited to those women who are working full time, (table 22) the results change somewhat. Vocational Concentrators in this group who are working in jobs for which they are trained still show an advantage in the HS&B sample. The signs remain the same and the magnitudes of the effects are similar in the NLS-Youth sample, but the results are not large enough in the limited sample to be confidently generalized to the population.

Similar changes in the findings are observed for the special groups. Hispanic women show uniformly positive wages and earnings advantages over majority white women, but the results are not uniformly generalizable. For NLS-Youth the findings are an adequate representation of the population of high school graduates, but are not sufficiently large to meet that criterion for the sample size in HS&B. The same situation is observed for black women. Again, there are no consistent and reliable effects for handicapped and limited English-proficient, full-time female workers.

Earnings Effects of High School Curriculum for Majority White Women

The pronounced earnings disadvantage suffered by white women has been shown in comparison to white men in the equations for all workers (tables 15 and 16) and relative to Hispanic and black women in the equations for all female workers (tables 21 and 22),



TABLE 21 EFFECTS OF HIGH SCHOOL CURRICULUM AND GROUP MEMBERSHIP ON HOURLY AND MONTHLY EARNINGS (Females, All workers)

		HS&B					<u>N</u>	<u>LS</u>		
	Hour	1y	<u>Mont</u>	hly		•	Hourly	Mont	<u>hly</u>	
	Parameter Estimate	t-val ue	Parameter Estimate	t-val ue	HS&B	Parameter Estimate	t-val ue	Parameter Estimate	t-val ue	NL: n
Education										
Concentrator	0.043*	1.98	0.096*	2.71	358	-0.042	-1.71	.)12	0.30	25
Limited Concentrator	0.022	1.13	•0 46	1.47	462	0.003	0.15	0.088	0.23	39
Concentrator/ Explorer	0.017	0.78	0.048	1.39	3 43	0.036	1.43	0.027	0.68	2
Academic	0.008	0.32	-0.043	-1.10	290	-0.028	-1.24	-0.007	-0.21	3
SR Vocational	-0.005	-0.17	-0.020	-0.45	238	0.012	0.36	0.022	0.42	1
SR Academic	0.043	0.93	0.006	0.08	65	0.020	0.77	0.058	1.41	2
Concentrator (TR)	0.092*	2.34	0.151*	2.34	88	0.082*	2.15	0.172*	2.82	
Limited Concentrator (TR)	-0.009	-0.22	-0.039	- 0.61	88	0.023	0.69	0.045	0.86	1
Concentrator/ Explorer (TR)	0.012	0.22	-0.004	-0. 48	42	-0.002	-0. 05	0.012	0.16	
Special Group										
Manania	0.035	1.69	0.029	0.86	450	0.074*	3.45	0.118*	3.48	4
Hispanic Native American	-0.023	-0.52	-0.020	-0.27	66	0.005	0.18	0.030	0.60	1
Native American Black	0.056*	2.62	-0.020	-0.29	413	0.063*	3.32	0.049	1.62	6
Other	0.056	1.95	0.019	0.35	138	0.008	0.38	0.003	0.10	3
	0.004	0.18	-0.013	-0.39	317	5555				
Handicapped Limited English	0.004	1.12	0.087	1- 7	100	0.032	-1.02	-0.025	-0.51	1
Proficient	0.042	1012	3,007	• • •	. • •	3442				

NOTE3: *indicates that the chance probability of an effect this large is \leq .05. All equations controlled for socioeconomic status, region, rural/urban location, achievement/ability, postsecondary education, current enrollment, labor market experience, and tenure. In addition, the HS&B equations controlled for the prusence of a spouse or child and occupation. SR refers to self-report, TR refers to training-related, MD refers to missing data.



		HS	<u>88</u>					NLS		
	Hour Par ameter	<u>ly</u>	<u>Mont</u> Parameter	hly	H\$&B	Par ameter	<u>Houriy</u>	Mont Par ameter	<u>.ly</u>	NLS
	Est imate	t-val ue		t-val ue	n	Estimate	t-val ue		î∼ vai ue	n
Absenteelsm	0.008	1.59	0.014	1.74	3258		_			
Discipline Problems	-0.000	-0.01	-0.030	- 0.84	295					
Trouble with Law	-0.069	-1.40	-0.045	0.55	52					
Work Composite	0.010	1.08	0.043*	2.74	3233					
8th-Grade Aspirations	0.012	0.79	0.020	0.82	1784					
10th-Grade Grade Point Average	-0.011	-1.06	-0.040*	-2.31	2994	0.007	0.62	-0.010	-0.60	2605
Work in High School	0.026	1.51	0.078*	2.77	2729					
Sel f-es teem	0.014	1.59	0.027	1.91	3230	0.004*	2.55	0.008*	3.16	3213
Locus of Control	-0.011	-1.00	0.015	0.78	3228					
Intercept	1.264	17.66	6.336	53.90	3258	0.651	10.14	5.302	53.36	3213
	R ² = 0	0.099	R ² ≖	0.194		R ² ≖	0.269	Ł 5≠	0.310	
	Adj. R2= 0		Adj. R ² =	0-178		Adj. R2=	0.262	Adj. R?-		
F=s1	hatistic = 5		F-statistic =			F-statistic =		F-statistic =		

TABLE 22

EFFECTS OF HIGH SCHOOL CURRICULUM AND

GROUP MEMBERSHIP ON HOURLY AND MONTHLY EARNINGS

(Females, Full-time workers)

		HS &B					<u> </u>	<u>ILS</u>		
	Hour	<u>1y</u>	Mont	hly			Hourly	Mont	hly	0
	Par ameter Estimate	t-val ue	Par ameter Est imate	t-value	HS&B n	Parameter Estimate	t-value	Parameter Estimate	t-value	NLS n
Education										
Concentrator	0.027	1.08	0.016	0.58	233	-0.022	-0.76	-0.026	-0.88	175
Limited Concentrator	0.014	0.61	0.024	0.99	281	-0.006	-0.24	-0.019	-0. 75	259
Concentrator/ Explorer	0.026	1.05	0.027	0.99	207	0.006	0.21	0.004	0.14	161
Academ 1c	0.022	0.69	0.005	0.14	1 25	-0.019	-0.70	-0.033	-1.16	230
SR Vocational	-0.013	-0.41	-0.017	-0.50	154	0.023	0.60	0.011	0.29	95
SR Academic	7. 078	1.35	0.079	1.27	34	0.007	0.23	-0.014	-0.44	176
Concentrator (TR)	0.105*	2.47	0.121*	2.63	64	0.075	1.84	0.060	1.42	75
Limited Concentrator (TR)	0.039	0.82	0.062	1.21	50	0.007	0.18	-0.012	-0.30	91
Concentrator/ Ex, orer (TR)	0.043	0.70	0.062	0.93	28	-0. 022	-0.44	-0.047	-0. 89	46
Special Group										
H1 spanic	0.037	1.53	0.036	1.38	282	0.080*	3.27	0.072*	2.83	3 19
Native American	0.010	0.19	0.014	0.25	41	0.053	1.52	0.049	1.35	102
Black	0.024	0.93	0.016	0.56	238	0.071*	3.15	0.060*	2.57	437
Other	0.051	1.20	0.061	1.32	66	0.001	0.03	0.007	0.26	204
Handicapped	-0.012	-0.50	-0.002	-0.08	197					
Limited English Proficient	0.028	0.63	0.049	1.00	61	-0.002	-0.05	-0.010	- 0.27	9:

NOTES: *Indicates that the chance probability of an effect this large is \leq .05. All equations controlled for socioeconomic status, region, rural/urban location, achievement/ability, postsecondary education, current enrollment, labor market experience, and tenure. In addition, the HS&B equations controlled for the presence of a spouse or child and occupation. SR refers to self-report, TR refers to training-related, MD refers to missing data.



		<u>HS</u>	<u>&B</u>					NLS		
	Hour Par ameter	<u>ly</u>	Mont Par ameter	hly	HS&B	Par ameter	Hour I y	<u>Mont</u> Parameter	hly	NLS
	Est Imate	t-val ue		t-value	n	Estimate	t-value		t– val ue	n
Absentee!sm	0.002	0.32	-0.000	-0.02	195 1					
Discipling Problems	0.010	0.40	0.014	0.52	193					
Trouble with Law	-0.100	-1.80	-0.044	~0.74	36					
Work Composite	0.009	0.77	0.011	0.85	1937					
8th-Grade Aspirations	0.012	0.69	0.012	0.65	983					
10th-Grade Grade Point Average	0.002	0.19	0.002	0.12	1777	0.007	0.54	0.004	0.29	1716
Work in High School	0.017	0.83	0.023	1.02	1642					
Self-esteem	0.017	1.66	0.026*	2.28	1937	0.006*	3.14	0.L 77*	3.68	2 121
Locus of Control	-0.011	-0.80	-0.014	-0.93	1936					
Intercept	1.154	13.58	6.306	68.87	1951	0•794	8.62	5•798	75.28	2121
	R ² = 0	.156	R ² ≖	0.156			0.274		0.264	
	Adj. R ² = 0	. 127	Adj. R ² =	0.128		Adj• R ² =	0.263	Adj. R ² =	0.254	
F=c+	atistic = 5		F-statistic =			F-statistic = :		F-statistic =		

where white women were the comparison group. Tables 23 and 24 present the findings regarding curriculum for these women. The HS&B data show a positive effect for female Concentrators who are working in training-related jobs. The effect is present for both full-time workers and all workers for hourly rate of pay, and for monthly earnings for full-time workers. NLS-Youth data do not show such a strong effect. The percentages in this database do show an advantage, however, and the values of the coefficients are large enough to suggest that the small sample size may be the cause of the nonsignificant finding. The alternative explanation of a sampling artifact may not be ruled out, however.

One interesting result may be observed in these tables. White female Concentrators who are not working in trainingrelated jobs have a wage advan ge among both full-time and all workers in the HS&B sample. T advantage was present for monthly earnings in the all-wc kers equation for majority white women and for all respondents, but not for full-time workers. occurs again on the equations for all women. In that sample white women are by far the largest component, suggesting that the finding may well be confined to them. This result is interesting because vocational education advocates have long argued that such a relationship should exist. The argument proceeds along the lines that vocational education provides some specific, but transferable skills as well as some general employability skills that employers will value and reward. If that is the case, an advantage should be observable in earnings in nontraining-related jobs. The finding is not verified in both databases, however, and may be a sampling artifact. It may also be real but confined to the Business specialty, in which women heavily predominate.

Handicapping conditions or limited English proficiency do not show any generalizable effects for majority white women. Overall, the effect of the high school vocational curriculum for white women tends to be positive (3 out of 22 coefficients are negative) for wages and earnings, but not unambiguously strong.

Earnings Effects of High School Curriculum for Majority White Men

Earnings expressed as wage rates or monthly earnings show a moderately strong advantage for the vocational curriculum in the high school for white males. Tables 25 and 26 present these data. The results are not uniformly consistent across both databases, however. Full-time workers who are vocational Concentrators or Limited Concentrators and who are working in training-related jobs have marked wage advantages in the HS&B data. They also have such an advantage in monthly wages if they are Limited Concentrators. These observations hold for all workers as well.

TABLE 23

EFFECTS OF HIGH SCHOOL CURRICULIM AND CROUP MEMBERSHIP ON HOURLY AND MONTHLY EARNINGS (White females, Full-time workers)

		H\$&B					<u>1</u>	<u>ILS</u>		
	Hour	<u>ly</u>	<u>Mont</u>	hly	44040		Hourly	Mont	hly	W C
	Parameter Estimate	t−value	Par ame ter Estima te	t−value	HS&B n	Parameter Estimate	t~value	Parameter Estimate	t-val ue	NLS n
Education										
Concentrator	0.059*	2.04	0.040	1.27	184	0.026	0.66	0.008	0.19	101
Limited Concentrator	0.041	1.47	0.049	1.58	178	-0.022	- 0.61	-0.031	- 0.83	129
Concentrator/ Explorer	0.049	1.63	0.046	1.40	1 45	-0.016	-0.39	-0.017	-0.40	85
Academic	0.009	0.23	-0.015	-0.36	88	-0.004	-0.10	-0.008	-0.20	140
SR Vocational	-0.021	-0.53	-0.02€	-0.60	102	0.036	0.58	0.021	0.33	36
SR Academic					21	0.043	0.96	0.028	0.60	84
Concentrator (TR)	0.172*	3.18	0•181*	3•იՑ	41	0.049	0.87	0.025	0.43	42
Limited Concentrator (TR)	0.027	0.45	0.027	0.43	31	-0.013	-0.24	-0.030	-0.53	45
Concentrator/ Expioner (TR)					9					18
Special Group										
Handicapped Limited English Proficient	-0.030	-0.96	-0.023	-0.69	121 4	-0.035	-0.66	-0.033	-0.60	44

NOTES: *Indicates that the chance probability of an offect this large is \leq .05. All equations controlled for socioeconomic status, region, rural/urban location, achievement/ability, postsecondary education, current enrollment, labor market experience, and tenure. In addition, the HS&B equations controlled for the presence of a spouse or child and occupation. SR refers to self-report, TR refers to training-related, MD refers to missing data.



		HS	<u>&B</u>					NLS		
	Hour Par ame ter	<u>1 y</u>	<u>Mont</u> Par ameter	<u>hì y</u>	H\$&B	Par ame ter	Hour I y	Mont Par ameter	<u>hiy</u>	NLS
	Est Imate	t-vai ue		t-value	n	Estimate	t~vai ue		t-value	n
Absenteel sm	0.006	0.77	0.004	0.49	1324					-
Discipline Problems	0.009	0.26	-G.001	-0.02	1 15					
Trouble with Law					19					
Work Composite	0.007	0.52	0.006	0.38	1318					
8th=Grade Aspirations	0.005	0.24	-0.006	-0.25	666					
10th-Grade Grade Point Average	-0.003	-0.20	0.001	0.06	1215	0.013	0.75	0.011	0.58	887
Work in High School	0.018	0.67	0.016	0.57	1148					
Self-esteem	0.014	1.09	0.024	1.73	1319	0.002	0.75	0.002	0.86	1034
Locus of Control	0.006	0.36	0.002	0.08	1318					
Intercept	1.168	11.77	6.324	58.66	1324	0.853	6.46	5 . 866	52.47	1059
	R ² = (. 162	R ² =	0.168		R ² ≖	0.303	R ² ≖	0.295	
	Adj. R ² = 0		Adj. R ² =			Adj. R ² =		Adj. R ² =	0.271	
	-		•			-		•		
F=st	atistic = 4	• 229	F-statistic =	4.401		F-statistic =	12.751	F-statistic =	12.5/9	

TABLE 24

EFFECTS OF HIGH SCHOOL CURRICULUM AND
GROUP MEMBERSHIP ON HOURLY AND MONTHLY EARNINGS
(White temales, All workers)

		HS&B					<u>N</u>	LS		
	Hour Par ame fei	ly	Mont Parumeter	<u>hly</u>	HS&B	Par ameter	Hourly	Mont Par ameter	hly	NLS
	Estimate	t-value	Estimate	t-value	n	Estimate	t-value	Est imate	t-value	n
Education		_				-				
Concentrator	0.060*	2.44	0.105*	2.51	272	-0.007	-0.19	0.017	0.31	146
Limited Concentrator	0.017	0.71	0.044	1.11	292	-0.004	-0.15	0.013	0.27	198
Concentrator/ Explorer	0.033	1.36	0.090*	2.12	23/	0.008	0.23	0.042	0.75	123
Academic	-0.004	-0.14	-0.071	-1.54	212	0.017	0.55	0.064	1.33	2 17
SR Vocational	-0.014	-0.41	-0.067	-1.19	158	0.046	0.87	0.082	0.99	54
SR Academic	0.043	0.78	-0.017	-0.18	44	0.073	1.79	0.144*	2.28	1 15
Concentrator (TR)	0.103*	2.08	0.107	1.28	53	0.091	1.74	0.151	1.85	52
Limited Concentrator (TR)	0.028	0.60	-0.051	-0.64	57	0.019	0.39	0.127	1.64	58
Concentrator/ Explorer (TR)					21					23
Special Group										
Handicapped Limited English Proficient	0.005	0.20	-0.018	-0.41	193 5	-0.052	-1.11	-0. 024	-0.32	61

NOTES: *Indicates that the chance probability of an effect this large is \leq .05. All equations controlled for socioecratic status, region, rural/urban location, achievement/ability, postsecondary eduration, current enrollment, labor market experience, and tenure. In addition, the HS&B equations controlled for the presence of a spouse or child and occupation. SR refers to self-report, TR refers to training-related, MD refers to missing data.



TABLE 24-Continued

		HS	&B					NLS		
	<u>Hour</u> Par ameter	<u>ly</u>	<u>Mont</u> Par ameter	hly	HS&B	Par ame ter	Hourly	<u>Mont</u> Par ameter	hly	NLS
	Estimate	t-val ue	Estimate	t-value	n	Estimate	t-value	Esilmate	t-value	n
Absentee! sm	0.008	1.38	0.014	1.36	2191					
Discipline Problem	s 0.002	0.07	-0.028	-0.61	177					
Trouble with Law	-0.086	-1.28	-0.043	-0.37	27					
Work Composite	0.019	1.72	0.045*	2.36	2180					
8th-Grade Aspirations	-0.001	-0.04	0.003	0.10	1206					
10th-Grade Grade Point Avera	-0.020 ge	-1.51	-0.039	-1.77	2030	0.014	0.87	0.002	0.08	133
Work in High School	0.044*	2.04	0.095*	2.61	1894					
Sel f-es teem	0.009	0.84	0.023	1.34	2180	0.003	1.15	0.006	1.55	155
Locus of Control	0.005	0.34	0.012	0.48	2179			••••		
Intercept	1.254	14.67	6.476	44.67	2 19 1	0.687	7•28	5,266	36.94	159
	$R^2 = 0$	•115	R ² =	0.220		R ² =	0.296	R ² *	0.341	
	$Adj \cdot R^2 = 0$		Adj. R ² =	0.198		Adj. R ² =		Adj. R ² =		
_	•					•		•		
F=:	statistic = 4	•626	F-statistic =	10.027		F-statistic =	18.707	F-statistic =	23.731	

TABLE 25

EFFECTS OF HIGH SCHOOL CURRICULUM AND

GROUP MEMBERSHIP ON HOURLY AND MONTHLY EARNINGS

(White males, Full-time workers)

		HS&B					<u> </u>	<u>LS</u>		
	<u>Hour</u> Parameter	<u>1y</u>	Mont Parameter	hly	HS&B	Par ameter	Hourly	Mont Parameter	hly	NLS
	Estimate	t-value	Estimate	t-value	n	Estimate	t-value	Est ima te	t-value	n
Education										-
Concentrator	-0.033	0.90	-0.040	-1.01	138	0.017	0.27	0.028	0.42	55
Limited Concentrator	-0.018	-0.59	-0.019	-0.58	225	-0.031	-0.69	-0.023	-0.50	1 16
Concentrator/ Explorer	0.011	• 0.27	-0.020	-0.46	113	0.011	0.17	0.031	0.46	50
Academic	-0.028	-0.77	-0.040	-1.02	156	0.018	0.42	0.018	0.40	154
SR Vocational	0.138*	3.16	0.113*	2.38	130	0.007	0.10	-0.004	-0.05	39
SR Academic	0.019	0.25	0.063	0.78	30	0.099	1.59	0.084	1.30	80
Concentrator (TR)	0.139*	3.03	0.095	1.91	85	0.082	5ذ.1	0.118	1.88	57
Limited Concentrator (TR)	0.169*	4•19	0.137*	2.96	97	0.033	0.50	0.054	0.77	44
Concentrator/ Explorer (TR)	0.131*	2.14	0.107	1.62	41	-0.102	-1.09	-0.095	-0.99	22
Special Group										
Hand I cap ped	-0.071*	-2.35	-0.060	-1.84	185	. 445				
Limited English Proficient					6	0.118	1.33	0.104	1.14	25

NOTES: *Indicates that the chance probability of an effect this large is \leq .05. All equations controlled for socioeconomic status, region, rural/urban location, achievement/ability, postsecondary education, current enrollment, labor market experience, and tenure. In addition, the HSSB equations controlled for the presence of a spouse or child and occupation. SR refers to self-report, TR refers to training-related, MD refers to missing data.



TABLE 25--Continued

Houriy beter 15 1.3 41 -1. 75 1.3 13 0.1 13 0.1	95 48 39	Mont Par ameter Es tima te 0.021* -0.039 0.091 0.012 -0.003	2.42 -1.33 2.12 0.69 -0.10	HS&B n 1530 250 104 1518	Parameter Estimate	-value	Mont Parameter Estimate	hiy ↑-vaiue	NLS n
15 1.41 -1.75 1.41 0.41	95 48 39	0.021* -0.039 0.091 0.012	2.42 -1.33 2.12 0.69	1530 250 104 1518		:=value		t-value	
41 -1. 75 1.1 13 0.1	18 39 36	-0.039 0.091 0.012	-1.33 2.12 0.69	250 104 1518					
75 1.1 13 0.1	39 36	0.091 0.012	2•12 0•69	104 1518					
13 0.1	36	0.012	0.69	15 18					
· · · · · · · · · · · · · · · · · · ·	1	-0.003	-0.10						
			-0.10	6 50					
)6 0.:	33	0.016	0.87	1395	0.009	0.42	0.007	0.32	97
57 0.5	8	0.070	1.70	1419					
0.	4	0.005	0.33	15 15	0.007	1.89	0.007*	1.99	111
5 -0.	30	0.004	0.19	1513			T-7-7-		
58 15•:	23	1.438	15.23	1530	1.128	7.45	6-110	44.06	114
2= 0.132					R ² ≖	0.231	R ² =	0.227	
² = 0.098		Adi. R ² =	0.111		Adia R ² =	0.207	Adl. R ² =	0-203	
		•					•		
	R ² = 0.132 R ² = 0.098	R ² = 0.132 R ² = 0.098	$R^2 = 0.132$ $R^2 = 0.098$ Adj. $R^2 = 0.098$	$R^2 = 0.132$ $R^2 = 0.145$ $R^2 = 0.111$	$R^2 = 0.132$ $R^2 = 0.145$ $R^2 = 0.111$	$R^2 = 0.132$ $R^2 = 0.145$ $R^2 = 0.098$ Adj. $R^2 = 0.111$ Adj. $R^2 = 0.111$	$R^2 = 0.132$ $R^2 = 0.145$ $R^2 = 0.231$ $R^2 = 0.098$ Adj. $R^2 = 0.111$ Adj. $R^2 = 0.207$	$R^2 = 0.132$ $R^2 = 0.145$ $R^2 = 0.231$ $R^2 = 0.098$ Adj. $R^2 = 0.111$ Adj. $R^2 = 0.207$ Adj. $R^2 = 0.207$	$R^2 = 0.132$ $R^2 = 0.145$ $R^2 = 0.231$ $R^2 = 0.227$ $R^2 = 0.098$ Adj. $R^2 = 0.111$ Adj. $R^2 = 0.203$

TABLE 26

GROUP MEMBERSHIP ON HOURLY AND MONTHLY EARNINGS (White males, All workers)

		HS&B					<u> </u>	ILS		
	Hour Parameter	ly	<u>Mont</u> Parameter	<u>hly</u>	HS&B		Hour I y	Mont	<u>hly</u>	
	Estimate	t-value	Estimate	t-value	n n	Parameter Estimate	t-value	Parameter Estimate	t-value	NLS n
Education										
Concentrator	-0.023	-0.70	0.023	0.47	165					
Limited Concentrator	-0.011	-0.41	-0.031	-0.83	165 315	0.041 -0.041	0.73 -1.03	0.022 -0.055	0•28 - 0•97	7 0 1 48
Concentrator/ Explorer	-0.010	-0.28	-0.010	-0.21	155	0.040	0.72	0.071	0.90	68
Academic	-0.026	-0.86	-0.021	-0.49	244	0.050	1 47	0.010		
SR Vocational	0.126*	3.23	0.170*	2.98	150	-0.017	1.43	0.018	0.37	237
SR Academic	0.045	0.76	0.086	1.00	4B	0.029	-0.26	-0.104	-1.09	50
Concentrator (TR)	0.132*	3.09	0.060	0.98	97	0.029	0.57	-0.074	-1.01	1 18
Limited Concentrator (TR)	0.160*	3.98	0.184*	3.14	106	0.100	1.84 1.22	0.240* 0.104	2.92 1.20	60 52
Concentrator/ Explorer (TR)	0-112	1.88	0.228*	2.64	43					22
Special Group										
Handicapped Limited English	-0.060*	-2.27	-0.046	-1.18	239					
Proficient					7	0.160*	2.19	-0.050	-0.48	36

NOTES: *Indicates that the chance probability of an effect this large is \leq .05. All equations controlled for socioeconomic status, region, rural/urban location, achievement/ability, postsecondary education, current enrollment, labor market experience, and tenure. In addition, the HS&B equations controlled for the presence of a spouse or child and occupation. SR refers to self-report, TR refers to training-related, MD refers to missing data.



TABLE 26--Continued

		<u>HS</u>	&B					MLS		
	<u>Hour</u> Par ameter	-1 y	Mont Par ameter	<u>th i y</u>	HS&B		Hourly	Mont	<u>hly</u>	
	Estimate	t-value		t-value	U 200	Par ameter Estimate	t-vai ue	Par ameter Estimate	t-value	NLS n
Absenteel sm	0.016*	2.26	0.021*	2.02	2031		_			
Discipline Problems	-0.008	-0.34	0.006	0.16	304					
Trouble with Law	0.044	1.24	0.062	1 - 19	128					
Work Composite	0.020	1.53	0.031	1.61	2015					
8th-Grade Aspirations	-0.011	-0.54	-0.020	- 0 .6 6	967					
10th-Grade Grade Point Average	-0.007	-0.48	-0.026	-1.21	1862	-0.012	-0.65	-0.041	-1.53	128
Work in High School	0.022	0.70	0.084	1.83	1868					
Self-esteem	0.001	0.12	0.003	0.14	2011	0.006	1.87	0.006	1.40	1 46
Locus of Control	0.009	0.58	0.020	0.91	2009	0.000	,,,,,	0.000	,,,,	, 40
Intercept	1.480	17.99	6.637	55.31	2031	0.831	6.95	5.830	35.55	149
	R ² = 0	. 1 19	R ² =	0,223			0.252		0.318	
	Adj. R ² = 0		2			Adj. R ² =				
	•		•	0.200		•		Adj. R ² ≖		
F-st	atistic = 4	.528	F-statistic =	9.601		F-statistic =	14.056	F-statistic =	20.013	

In the case of the NLS-Youth data, only monthly earnings in the all-workers group show a significant advantage. That advantage is for the Concentrators. As noted for certain of the other groups, all of the coefficients are positive for Concentrators and Limited Concentrators. They are also close in size to those that are significant in the unrestricted sample of all workers, regardless of group membership. Thus, although the positive effect of the vocational curriculum for those white men who concentrate is not firmly established, the general direction of the evidence seems to favor such an interpretation.

A second finding of interest in the two samples of majority white men is the pair of significant coefficients for self-reported vocational education. This finding also occurs for hourly wages in the equation for all full-time workers. In that case it is less than half the size of the value for the majority white males. This suggests that the effect is largely a white male phenomenon because, next to white females, these white males are the largest group in that sample.

Previous work (Campbell, Orth, and Seitz 1981) has shown that self-report is not a very reliable indicator of curricular pathways as shown by transcript data. In NLS-Youth, as many as 7 percent who classified themselves as vocational graduates had not taken a single vocational course in high school. Examination of the question in the HS&B data as part of this project showed as much as 50 percent disagreement. This suggests that what is captured by the self-report is more of an attitude toward working than a school curriculum. If that speculation is true, then employers must be rewarding that attitude on the job. These analyses do not provide a test of that conjecture, however.

For white males, a handicapping condition is associated with a disadvantage in hourly wages. Unexpectedly, limited English proficiency is associated with an advantage! There is no ready explanation for that finding, nor for the equally perplexing association of school absenteeism with a wage advantage. These remain for further examination in some subsequent study with additional data.

Earnings Effects of High School Curriculum For Low SES Workers

The wages and earnings effects for low-SES workers are presented in tables 27 and 28. The larger sample size for the all-workers group permits more significant effects to emerge, but one of the most notable findings that can be observed in these data is found in the full-time workers group. For full-time, low SES workers, the academic curriculum is associated with higher wages and earnings. This finding does not occur with any other



GROUP MEMBERSHIP ON HOURLY AND MONTHLY EARNINGS (Low socioeconomic status, All workers)

	HS &B					<u>NLS</u>				
	Hourly Monthly			hly		Hourly Monthly				
	Parameter Estimate	t-value	Par ameter Estimate	t-value	HS&B n	Estimate	t-value	Parameter Estimate	t-value	NLS n
Education										
Concen trator	0.031	1.01	0.047	05	203	-0.04	-1.04	-0.042	-0.62	ď
Limited Concentrator	0.019	0.67	-0.018	-0.45	268	0.0	0.00	0.008	C. 15	12
Concentrator/ Explorer	0.004	0.13	-0.007	-0.15	171	7.0-	0.7;	0.(62	0.90	7
Academilo	-0.068	-1.47	-0.262*	- 3.90	82	0.055	1.04	0.054	0.67	5
SR Vocational	0.059	1.56	0.045	0.83	151	0.071	1.43	0.134	1.76	6
SR Academic	0.124	1.54	0.062	0.53	23	0.038	0.75	0.053	0.68	6
Concentrator (TR)	0.134*	2.89	0.084	1.26	76	0.086	1.34	0.240*	2.46	3
Limited Concentrator (TR)	0.132*	2.68	0.151*	2.11	64	0.048	0.89	0.129	1.56	5
Concentrator/ Explorer (TR)	0.079	1.08	-0.023	-0.22	21					2
Special Group										
Male										
Hispanic	0.045	1.35	0.072	1.50	250	-0.029	-0.62	-0.022	-0.31	16
Native American	0.055	0.78	0.132	1.29	32					1
Black	0.058	1.49	-0.020	-0.35	153	-0.043	-0.90	-0.038	-0.52	12
Other					19	0.025	0.33	0.114	0.96	2
Female						****		*****		
Hispanic	0.004	•09	-0.040	-0.72	215	• J.112*	-2.57	-0.023*	-3.37	21
Native Ame, ican	-0.097	-1 - 25	-0.127	-1.13	27	-0.225*	-2.98	-0.371*	-3.23	7
B) ack	0.027	0.68	-0.077	-1.31	183	-0.137*	-3.01	-0.276*	-4.00	16
Wh I te	-0.065*	-2.08	-0.160*	-3.5 0	411	-0.201*	-4.55	-0.327*	-4.87	15
Other	0.053	0.67	-0.021	-0.18	28	-0.134*	-1.98	-0.218*	-2.12	3
Fandicapped	-0.007	-0.24	-0.015	-0.37	210	V.1.24	, . , ,	012.10		_
Limited English	-0.020	-0.52	-0.065	-1.14	116	-0.037	-0.86	-0.059	-0.89	7
Proficient	0.020	V•74	0.007	-1014	110	-0.057	-0.00	-0.039	0.03	,

NOTES: *Indicates that the chance probability of an effect this large is \leq .05. All equations controlled for socioeconomic status, region, rurai/urban location, achiev ment/ability, postsecondary education, current enrollment, labor market experience, and tenure. In addition, the HS&B equations controlled for the presence of a spouse or child and occupation. SR refers to self-report, TR refers to training-related, MD refers to missing data.



		HS	6 <u>&B</u>		<u>NLS</u>					
	Par ameter Estimate	<u>iy</u> t∼value	<u>Mont</u> Parameter Estimate	<u>hly</u> t∼value	HS&B n	Parameter Estimate	Hourly t−value	Mont Par ameter Estimate	<u>hly</u> t−value	NLS n
Absentee I sm	0.014	1.89	0.023*	2.12	1663			- -		
Discipline Problems	-0.010	-0.38	-0.018	-0.48	265					
Trouble with Law	-0.051	-1.11	0.077	1.15	72					
Work Composite	-0.005	-0.38	0.043*	2.06	1640					
8th-Grade Aspirations	~0.013	-0.59	0.010	0.31	607					
10th-Grade Grade Point Average	0.007	0.49	0.012	0.53	1506	-0.002	-0.11	-0.017	-0.56	81
Work in High School	-0.016	-0.64	0.003	0.08	1368					
Self-esteem	0.017	1.35	0.019	1.03	1631	0.008*	2.74	0.014*	2.94	101
Locus of Control	-0.036*	-2.34	-0.028	-1.28	1627	0.000	2017	0.014	2.74	101
Intercept	1.319	1 4. 19	6.429	47.79	1663	0.787	6•73	5. 477	31.85	103
	R ² = 0	.143	_R 2 ₌	0.280		R ² ≠	J . 284	R ² =	0.332	
	Adj. $R^2 = 0.107$		Adj. $R^2 = 0.249$			Adj. R ² ≖		Adj. R ² = 0.309		
F-c+	F-statistic = 3.912			F-statistic = 9.092			F-statistic = 11.299 F-statistic = 14.603			

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EFFECTS OF HIGH SCHOOL CURRICULUM AND
GROUP MEMBERSHIP ON HOURLY AND MONTHLY EARNINGS
(Low socioeconomic status, Full-time workers)

	<u>HS &B</u>					<u>NLS</u>					
	<u>Hourly</u>		<u>Monthly</u>				Hourly	<u>Monthly</u>		NLS	
	Par ameter Estimate	t-value	Par ameter Estimate	t-value	HS&B n	Parameter Estimate	t-vai ue	Parameter Estimate	t-value	n n	
Education		· •									
Concentrator	0.026	0.81	0.016	0.47	148	-0.020	-0.40	-0.032	-0.62	59	
Limited Concentrator	-0.015	-0.51	-0.014	-0.44	186	0.016	0.37	0.010	0.22	90	
Concentrator/ Explorer	-0.010	-0.28	-0.020	-0.53	1 19	-0.011	-0.21	-0.017	-0.32	54	
Academic	0.032	0.56	0.008	0.13	43	0.129*	2.14	0.139*	2.22	40	
SR Vocational	0.057	1.41	0.045	1.06	118	0.094	1.71	0.107	1.87	50	
SR Academic					12	0.048	0.82	0.047	0.77	42	
Concentrator (TR)	0.081	1.69	0.053	1.04	58	0.081	1.25	0 • 105	1.56	32	
Limited Concentrator (TR)	0.141*	2.91	0.110*	2.14	55	0.028	0•49	0.022	. 36	40	
Concentrator/ Explorer (TR)					21					17	
Special Group											
Male	0.071	0.92	0.028	0.78	203	0.005	0.10	-0.007	-0.13	12	
Hispanic	0.031 0.000	0.92	0.010	0.14	27	0000	•			1	
Native American	0.000	1.48	0.042	0.98	113	-0.030	-0.57	- 0.055	-1.04	9	
Black Other	0.000	,,,,	0.042	0070	13					2	
<u>Female</u>			0.006	-0.59	140	-0.128*	-2.68	-0.171*	-3.49	14	
Hispanic	-0.004	-0.10	-0.026	-0.59	16	-04120	2.00	00177	20.0	2	
Native American	-0.029	-0.67	-0.039	-0.84	111	-0.173*	-3.43	-0.218*	-4.19	11	
Bl ack		-0.67 -1.47	-0.078*	-2.22	267	-0.165*	-3.35	-0.205*	-4.03	10	
White	-0.048	-1 • 4 /	-0.070	-2 + 22	13	*****				2	
Other	-0.028	-0.96	-0.046	-1.50	159						
Handicapped	-0.028 -0.007	-0.15	0.021	0.46	77	0.008	0.17	0.001	0.02	5	
Limited English	-0.007	-0017	01021	00.10							
Profic ien t											

NOTES: *Indicates that the chance probability of an effect this large is \leq .05. All equations controlled for socioeconomic status, region, rural/urban location, achievement/ability, postsecondary education, current enrollment, labor market experience, and tenure. In addition, the HS&B equations controlled for the presence of a spouse or child and occupation. SR refers to said-report, TR refers to training-related, MD refers to missing data.

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	HS &B					<u>NLS</u>					
	<u>Hourly</u> Parameter		<u>Monthly</u> Parameter		UC\$0		Hour I y	Monthly			
	Est imate	t-value		t-value	HS&B n	Parameter Estimate	t-value	Parameter Estimate	t-value	NL:	
Absenteelsm	0.005	0.63	0.005	0.66	1 189						
Discipline Problems	-0.027	-0.98	-0.011	-0.38	214						
Trouble with Law	-0.010	-0.21	0.031	0.63	61						
Work Composite	0.017	1.10	0.022	1.35	1 176						
8th-Grade Aspirations	-0.013	-0.54	-0.016	-0.65	400						
10th-Grade Grade Point Average	0 •00 5	0.32	0.012	0.71	1072	-0.020	-0.88	-0.034	-1.45	59	
Work in High School	-0.044	-1.61	-0.032	-1.12	984						
Self-esteem	0.017	1.28	0.015	1.02	1 168	0.008*	2.21	0.007#	1 00	74	
Locus of Control	-0.029	-1.83	-0.035*	-2.04	1165	0.000	2.21	0.007*	1.98	74	
Intercept	1.343	14.00	6.555	64.57	1 189	1.178	7.26	6.205	47.23	759	
R ² = 0∙196			R ² = 0.219		_	R ² ≖ (0•275	_R 2 _#	0.283		
Adj. R ² = 0.147			Adj. R ² = 0.172			Adj. R ² = 0.240		Adj. R ² = 0.249			
F-statistic = 4.002			F-statistic = 4.616			F=statistic = 1		F-statistic =			

SDIC.

group, nor for all full-time workers in the two samples. Because it is an isolated finding, occurring only in the NLS Youth data, it cannot be considered conclusive. However, there are intuitive reasons to believe that such an effect might exist in the population of low-SES students who graduated and became full-time workers. The assumption is that the curricular emphasis on communication, mathematical, and scientific skills might mediate the widely observed association between low SES and unfavorable labor market positions. Certainly the rhetoric of reports such as A Nation At Risk (1983) implies such an assumption. Why the effect disappears when about one-third more part-time workers are added to the sample, and why, in the HS&B data the opposite effect is observed, does not have a ready explanation. This finding raises a question that deserves further study.

The apparent effects of high school vocational education follow a familiar pattern for this group. For Concentrators and Limited Concentrators who are in training-related jobs, all of the coefficients are positive. However, they are not uniformly significant across both patterns of vocational participation and across both databases. On balance it appears likely that there is some positive effect, but it is not large enough to be uniformly observed.

Gender effects are similar to, but stronger than, those observed in the total sample of workers that comprise the NLS-Youth part of the group. For low SES white women, the disadvantage in monthly earnings is 33 percent compared to white men, but in the total group, the disadvantage is only 10 percentage points. The HS&B sample shows a similar disadvantage for white women only and not for the other female groups. Neither a handicapping condition nor limited English proficiency show generalizable results, although in this sample the signs are in the expected direction in the all-workers groups of both databases. In general, the overall findings for the total group of all workers hold for the low SES group as well.

The overall implications of the findings reported here are presented in chapter 5. The suggestions for policy that these data provide are also considered in that chapter.

CHAPTER 5

SUMMARY, CONCLUSIONS, AND POLICY IMPLICATIONS

It is well understood that the extent and character of education and training are significantly related to how well individuals do in the labor market. That certain population groups suffer disadvantages in the labor market is also well known. Whether there are interrelationships between educational background and membership in these groups is a matter that has received inadequate attention, and is the focus of the present study. More specifically, the fourfold aim of the study has been to ascertain the following:

- O What environmental factors and student characteristics--including membership in the population "groups of special interest"--are associated with the selection of the several high school curricula.
- o How high school curriculum and membership in the groups of special interest affect the extent and character of postsecondary education.
- O How high school curriculum affects subsequent success in the labor market (controlling for postsecondary education), and whether the effects appear to be the same for each of the groups of special interest.
- O How membership in each of the groups of special interest affects labor market experience when both educational experience and other personal and environmental characteristics are controlled.

To meet these objectives two longitudinal data sets have been used, each based on a representative national sample of high school graduates. The High School and Beyond (HS&B) sample consists of 23,261 high school graduates who were surveyed for the first time as sophomores in 1980 and resurveyed in 1982 and 1984. The sample from the National Longitudinal Surveys of Youth (NLS-Youth) consists of 7,915 young men and women who were first interviewed in 1979 when they were between the ages of 14 and 21, and who have been reinterviewed annually thereafter. Information on postsecondary education and labor market experience has been drawn from the 1984 survey of the HS&B sample and from the 1983 interviews with the NLS-Youth sample. Thus, the HS&B data relate to a very narrow age range of youth, none of whom had been out of high school for more than 2 years. The NLS-Youth data, on the other hand, relate to youths spanning a 7-year age range, the oldest of whom may have been out of high school for 7 or 8 years.



Although neither data set was designed specifically for the purposes of the present study, each is remarkably rich in the data required for the analysis, especially the detailed information on labor market experience provided by the NIS-Youth and the various test results and attitudinal measures provided by HS&B. Data on high school curriculum in each of the surveys have been supplemented, moreover, by collection of transcripts for a subset of the respondents. Both data sets permit identification of a number of minority racial/ethnic groups by gender: blacks, Hispanics, Native Americans, and Asians. In addition, both databases permit classification of individuals by socioeconomic status and by English language proficiency. Finally, the HS&B data identify individuals with physical, mental, or emotional handicaps. Thus, the groups of special interest that have been analyzed are women, blacks, Hispanics, Native Americans, Asians, persons of low socioeconomic status (SES) (lowest quartile), the handicapped, and persons with limited English proficiency (LEP). Sample size has frequently not permitted stratification by each of these characteristics; the analysis is, therefore, most complete for women, blacks, Hispanics, and low SES youth, but each of the other groups is at least represented by a variable in regressions.

The evidence based on this mass of data, which has been presented in chapter 4, is both detailed and complex. It is desirable at this point to draw together the principal conclusions that the findings appear to warrant, without repeating the supporting evidence. The generalizations are organized along the lines of the four questions outlined at the beginning of this chapter, and end with a summary statement about each of the groups of special interest. Unless otherwise indicated, all relationships that are described are net relationships—that is, they reflect statistically significant coefficients in a multiple regression model with appropriate controls for other variables. Following this summary of conclusions, the chapter will end with a discussion of policy issues to which the research findings are relevant.

Determinants of High School Curriculum

o The high school vocational education curriculum attracts, in disproportionate numbers, youths from the lower socioeconomic strata, rural youths, youths of lower ability (as measured by conventional intelligence or academic achievement tests), and youths with feelings of personal inadequacy (low self-esteem).



- O Controlling for the foregoing factors, both gender and race and ethnicity are associated with the selection of the vocational curriculum. Hispanic and black men and men of other race/ethnic groups (except Native American) are less likely than non-Hispanic white men to enroll.
- o The factors leading to enrollment in the academic curriculum (as opposed to the vocational and general curricula) are in some respects the mirror images of those leading to vocational education enrollment, particularly high ability and high SES.
- o Handicapped students, according to simple cross-tabulations, are relatively twice as numerous in the general as in the academic curriculum (14 versus 7 percent); the proportion of handicapped students in the vocational curriculum falls between these extremes.
- o On the basis of simple cross-tabulations there are pronounced gender differences in distribution by specialty within the vocational education curriculum. Of the two largest specialties, together accounting for 85 or 90 percent of total enrollment, Trades and Industry substantially overrepresents males, while Business substantially overrepresents females. Among the smaller specialties, males are overrepresented in Agriculture and underrepresented in Health Care.
- o Variations in specialty according to race/ethnicity and handicap status (again based on simple cross-tabulations) are considerably less pronounced than the differences by gender. However, minority youth are less likely than whites to enroll in Business and more likely to enroll in Trades and Industry. Handicapped students are least likely to appear in Business and Distributive Education and most likely to enroll in Home Economics and Agriculture.

Determinants of Postsecondary Education

o The likelihood of continuing education beyond high school is significantly greater for youth of higher socioeconomic status, greater ability, higher self-esteem, more favorable high school grades, and from urban environments.



- o With the above factors controlled, there are differences by race/ethnicity in the likelihood of further education. Hispanic and black high school graduates--men and women alike--are significantly more likely than non-Hispanic white males to continue their education.
- o Again controlling for the other determinants of postsecondary education, there are some differences by high school curriculum. Specifically, graduates of the vocational curriculum are no less likely than those of the general curriculum to pursue further education; graduates of the academic curriculum are more likely than the general and vocational curriculum graduates to do so.
- When attention is confined to those who continue their education beyond high school, there are differences according to both high school curriculum and race/ethnicity in the type and extent of further education. Many of the same factors that channel youth into the vocational curriculum in high school tend to channel the high school graduates into vocational, trade, or business schools (as opposed to 2- or 4-year colleges)--low socioeconomic status, low ability, low self-esteem, and (in addition) low high school grades. Moreover, even with these factors controlled, graduates of the high school vocational curriculum are more likely than those from the general curriculum to enter these types of schools. Hispanics and blacks are less likely than non-Hispanic whites to do so.
- o Among high school graduates who enter 2- or 4-year colleges rather than vocational, trade, or business schools, those from higher SES backgrounds, with greater ability, with better high school grades, and with higher self-esteem go into the 4-year programs. Controlling for these factors, black men and women are more likely than white males to do so.

Earnings

o Pursuing a vocational curriculum in high school has a clear payoff in hourly and weekly earnings for youth who are subsequently employed in jobs related to their training. The evidence is virtually conclusive for all categories of workers combined and for white males. Evidence of such an advantage for



the vocational curriculum is considerably less clear for women, and virtually nonexistent for blacks and Hispanics, although the pattern of results suggests the possibility that had sample sizes been larger, the results for these groups would be comparable to those for all workers.

- o In any case, the favorable results for the vocational curriculum are tempered by the fact that well over one-half of the workers whose high school transcripts indicated a vocational program were working in jobs apparently unrelated to their training. For these persons, no earnings advantage is discernible.
- Differences in the extent of postsecondary education, other things being equal, make a substantial difference in hourly and monthly earnings. Data from NLS-Youth provide a better measure than the HS&B data for several reasons, but especially because members of the latter sample could not have had more than 2 years of postsecondary schooling. When attention is focused on full-time workers in the NLS-Youth sample who are not currently enrolled in school, persons with 2, 3, and 4 or more years of post-high school education enjoy hourly wage advantages of 5 percent, 9 percent, and 18 percent, respectively, over those with no postsecondary schooling; differentials in monthly earnings are The corresponding patterns for women, Hispanics, blacks, and workers from low SES backgrounds are not nearly so regular; yet in each case, those with 4 or more years of postsecondary work have an earnings advantage of at least 20 percent over those who ended their education with graduation from high school.
- o With education and other factors related to productivity controlled, significant gender differentials in earnings remain. Depending on the sample and measure of earnings used, white females earn from 8 percent to 28 percent less than white males, and gender differentials in the neighborhood of 10 percent or more prevail among blacks, Hispanics, and low SES individuals of all races.
- o On the other hand, with respect to race and ethnicity, there is no evidence of earnings differentials in favor of whites once other characteristics are controlled. Specifically, among males there are no significant differences between non-Hispanic



whites on the one hand and blacks, Hispanics, or Native Americans on the other. In the ase of Native Americans, however, the signs of coefficients are generally negative, leading to the suspicion that if sample sizes were larger, significant differences in favor of white might emerge. Among women, none of the data show differentials in favor of whites, and in several cases significant differences in favor of blacks and Hispanics appear.

Labor Force Farticipation and Employment

- Noth labor force participation and employment appear to be more continuous for graduates of the high school vocational edication curriculum than for other high school graduates. This, at least, is the conclusion to which one is led on the basis of the NLS-Youth data (which are probably more reliable than the HS&B data for these variables;. Controlling for postsecondary education, the vocational graduates were in the labor force for a larger proportion of the total time since high school graduation than t^{ν} general curriculum graduates, and the latter, in tu n, had greater participation than their counterparts from the academic curriculum. Of perhaps greater significance, the vocational graduates also had more favorable unemployment experience than graduates of the general curriculum: that is, of the total number of weeks in the labor torce since high school graduation, the vocational graduates enjoyed the highest proportion of weeks of employment.
- O Black males have both less continuous labor force participation and less favorable employment experience than their white counterparts. As would be expected, women of all racial and ethnic groups have lewer rates of labor force participation than non-Hispanic white males; black women also have less regular employment.

Profiles of the Groups of Special Interest

High school graduates between the ages of 18 and 25 in the United States in 1983 were almost equally divided between men and women. About three-fourths of the total number were non-Hispanic whites, close to 12 percent were blacks, and slightly over 5 percent were nonblack Hispanic. Native Americans and Asians each accounted for about 1 percent of the total, and members of all other races made up the remainder.



In addition to the potential disadvantage of minority racial or othnic status, and of being female in a society in which vestiges of traditional female subservience are still evident, some youths are plagued by physical, mental, or emotional handicaps and some suffer the disadvantage of being less than proficient in English. Approximately one in nine of the youths reported handicaps and 1.4 percent had LEP. These, together with the youths in the bottom one-fourth of the socioeconomic hierarchy, are the "groups of special interest" with whom this study has been concerned. A brief summary description of each, based on the principal research findings, is presented below.

Women

Within the vocational curriculum, women tend to gravitate toward the Business specialty, which trains them for traditionally female jobs, and to avoid the Trades and Industry specialty, which is dominated by men. To what extent this results from subtle discrimination, from inadequate counseling, and/or from the culturally conditioned choices that young women make cannot be ascertained from the data, but there is not much question about its effect. The training that women get channels them into lower paying jobs relative to those of men.

Other things being equal, white women are neit er more nor less likely than white men to continue their education after graduating from high school, but appear to be less likely to do so than their black and Hispanic counterparts. Moreover, among those who do continue their education, white women are more likely than Hispanic or black women to choose vocational or business schools rather than 2- or 4-year colleges.

Women have less regular labor force attachment than men after they leave high school, but even when this and other factors are controlled, their hourly and monthly earnings are below those of men. This is a universal phenomenon, existing alike among whites, Hispanics, and blacks.

Hispanics

Hispanic youths tend to be disadvantaged relative to nonmispanic whites in at least three important respects. They are about three times as likely to be in the lowest quartile of the total population according to socioeconomic status; they are almost one-half again as likely to suffer a handicap; and they contain much larger proportions of individuals with limited English language proficiency (8 percent versus 0.5 percent in the rest of the population). Perhaps as a result, they are almost twice as likely as non-Hispanic whites to drop out of high school (36 percent versus 20 percent) (table C.29). The present study



is, of course, confined to high school graduates and, moreover, controls for ability, socioeconomic status, LEP, and a number of other factors that may be expected to be correlated both with ethnicity and with outcome measures. Nevertheless, if there is a "penalty" attached to failure to complete high school, and if there is reason to believe that the penalty is greater for minority than for nominority youth, the findings of this study may be expected to overstate the achievements and rewards of Hispanics (and other minorities) relative to those of non-Hispanic whites for the population as a whose.

Within the group of high school graduates, and controlling for other factors, Hispanic males are less likely than non-Hispanic white males to have been in the vocational corriculum. After high school graduation Hispanic men and women are more likely than non-Hispanic whites to pursue postsecondary schooling; among all youths who do so, they are more likely than other whites to attend colleges rather than vocational, trade, or business schools. Finally, among all college-goers they are at least as likely as other whites to opt for 4-year rather than 2-year programs.

Controlling for educational attainment, ability, SES, and other factors, there is no significant difference in the earnings of Hispanic and other white males. In the case of women, on the other hand, there is actually an advantage in favor of the Hispanics. Confining attention to the Hispanic group, high school curriculum appears to make no difference with respect to subsequent earnings, but the extent of postsecondary education does. The earnings advantages of those with 1 to 3 years of education beyond high school relative to those with none barely miss being statistically significant, and would probably become so if sample sizes were larger. Even with the existing sample size, those with 4 or more years of post-high-school education are shown to earn 36 percent more than otherwise comparable youths who ended their education with high school—a highly significant difference.

Placks

The fact that the analysis has been confined to high school graduates requires the same caveat with respect to blacks that has already been emphasized in the discussion of Hispanics. Like the Hispanics, black youths are more likely than whites to be found in the lower socioeconomic strata and are more likely to have dropped out of high school, although the higher incidence of handicaps and of limited English proficiency that prevails among Hispanics is not discernible in the case of the blacks.

Among all recent high school graduates, once one controls for the effects of such factors as ability and SES, black youth



are less likely than whites to have opted for the vocational curriculum. Of all students in the curriculum, simple crosstabulations show that blacks are overrepresented relative to majority whites in the Trade and Industry and Home Economics specialties and are underrepresented in Business.

Black high school graduates--males and females alike--are significantly more likely than comparable whites to continue their education. Moreover, of those who go on, blacks are less likely than whites to opt for vocational or business programs and more likely to pursue 4-year, rather than 2-year college programs.

The generalizations that can be made about the earnings of blacks parallel those that have already been reviewed for Hispanics. There is no evidence of an earnings differential between black and white males who are comparable in other respects, and among females the advantage appears to lie with the blacks. High school curriculum appears to have no independent effect on earnings, but those who pursue education beyond high school nave higher earnings than those who do not. This is especially true of the youths who complete 4 or more years of postsecondary schooling, among whom the earnings advantage is between 20 percent and 25 percent.

Low SES Students

The characteristics and experience of students in the lowest socioeconomic quartile of the population parallel those of Hispanics and blacks. These minorities, as has been seen, are disproportionately represented in that population group; nevertheless, because of their much greater numbers in the total population, there are more non-Hispanic whites than the combined total of Hispanics and blacks at the bottom of the SES hierarchy.

Low SES youth are less likely than other high school graduates to have been enrolled in vocational education and are more likely to have come from the academic curriculum. They are more likely to pursue postsecondary education, and among all those who do, they are less likely to opt for vocational programs and more likely to take 4-year than 2-year college courses. These results parallel those that have already been described for Hispanics and blacks; they lead one to believe that among all three groups, youth who complete high school are self-selected subsets of their respective populations; they appear to be highly motivated toward academic achievement at least from the time they make their high school curriculum choices.



High school curriculum makes a difference for this group as far as subsequent earnings are concerned. Among those in fulltime jobs after the completion of schooling, graduates of the academic curriculum have an earnings advantage over graduates of the general curriculum—a relationship that is not found in any of the other groups analyzed. Vocational graduates likewise have an advantage over their general curriculum counterparts, but only if they end up in training—related jobs. Controlling for high school curriculum, the low SES youths who go on to complete 4 or more years of postsecondary education have an earnings advantage of about 25 percent over those who end i eir education with their high school diploma.

Native Americans and Other Race/Ethnic Minorities

The numbers of sample cases representing Native Americans, Asians, and other races have generally been too small to allow definitive statements about their experience. If one does not insist upon statistically significant regression coefficients and is willing to draw tentative conclusions on the basis of the general pattern provided by the signs of those coefficients, it is possible to say that Native American males appear to be more likely than comparable whites to have graduated from the vocational and the academic curricula in high school, and correspondingly less likely to have come from the general curriculum. seem also somewhat more likely than their white counterparts to continue their education after graduation, and, among those who do so, to select vocational rather than college programs. the males who elect to go to college, however, it appears that the Native Americans, more frequently than the whites, choose the 4-year programs. Female Native American high school graduates are more likely than white males to have come from the vocational curriculum and are less likely to have graduated from the academic program.

Controlling for other factors, the parnings of male Native Americans appear to be somewhat below those of their white counterparts. A comparable racial differential does not seem to prevail in the case of the women, however; indeed, if there is a difference in the case of full-time women workers i would seem to be in favor of the Native Americans. For other acial/ethnic groups the earnings patterns are similar, but somewhat more uniform. Among men, the earnings coefficients for other groups (relative to majority whites) are uniformly negative; for women they are uniformly positive.

Individuals with Handicaps

Because of their relatively small numbers, the evidence concerning the handicapped is also quite limited. Even aside



from the relatively small numbers of handicapped individuals, it needs to be kept in mind that confining the sample to high school graduates means that the most serious physical and mental handicaps are probably unrepresented in the data. Nevertheless, in the hourly wage equations for all full-time workers and for white males, there is evidence that handicapped respondents earn significantly less than otherwise comparable individuals with no such disabilities. Moreover, in the equations for other subsets of the entire HS&B sample, the signs of the handicap variable are almost invariably negative, providing a reasonable basis for the belief that the handicapped youths generally suffer an earnings d'sadvantage in the labor market.

Limited English Proficiency

No comparable statement can be made, however, concerning the effect of limited English proficiency. The sample was very small and not reliably identified in the database. Aside from the finding that IEP youths have spent a significantly smaller proportion of their time in the labor force than those without such a limitation, there is no evidence of a labor market penalty attached to LEP. Signs for the coefficient in earnings equations are positive at least as frequently as they are negative.

Interpretations and Policy Considerations

Up to this point the conclusions that the evidence seems to warrant have been described with little in the way of interpretation or evaluation. This concluding section of the chapter is more subjective; it assesses the significance of some of the findings either from the standpoint of public policy or from the standpoint of the further research that they suggest.

One of the most interesting findings of the study is the absence of labor market disadvantage of blacks, Hispanics, and low SES persons when other factors are controlled. Among males, the Hispanics and blacks earn as much as non-Hispanic whites; among females, the blacks and Hispanics actually earn more. These results imply that the control variables used in the regressions have perfectly compensated for whatever real differences in productivity may exist among these groups and that among recent high school graduates earnings data provide no evidence of racial or ethnic labor market discrimination, at least as far as blacks and Hispanics are concerned.

While there is evidence that racial differences in labor market rewards (controlling for other factors) have diminished in recent years, probably at least in part as the result of public policy measures (Daymont 1981, 1983), it is hard to believe that racial and ethnic labor market discrimination is exclusively a



historical phenomenon. If this judgment is correct, then the findings that have emerged here are attributable to the fact that the sample consists entirely of high school graduates; with an unrestricted sample, racial/ethnic earnings differentials might well be discernible.

Even so, the absence of such differentials in the present study is significant from a policy point of view, for it underlines the importance of keeping the Hispanic, black, and low SES students in high school. If the line of reasoning outlined above is correct, reducing the above-average dropout rates of these youth would have an even greater effect or their subsequent labor market success than an equivalent reduction in dropout rates would have for whites. It must be acknowledged, however, that this conclusion rests on the assumption that the fact of high school completion itself makes the difference. To the extent that the difference between graduates and dropouts reflects solely prior characteristics that increase the likelihood of both graduation and subsequent success, it would of course be vacuous to suppose that a simple increase in high school graduation rates would tend to reduce inequality in labor market outcomes.

The absence of racial and ethnic earnings differentials is encouraging; on the other hand, controlling for ability, level of education, extent of labor market experience, and other relevant variables, women consistently earn less than men. The pronounced gender differences that have been found in all of the analyses are cause for concern both on grounds of equity and from the perspective of efficient resource allocation. This study has not attempted to uncover the reasons for the disparities, and even studies designed by economists to do so have not yielded unanimous judgments on the issue. Yet it is difficult to avoid the conclusion that such differentials stem at least in part from differences in the socialization process for men and women—occurring both in the family and in the school—that lead women into lower paying work.

From the perspective of educational policy, the goal should be to eliminate gender stereotypes that have this result. One manifestation of such stereotypes is the fact that women are disproportionately represented in business and office vocational programs that, on average, lead to lower paying jobs than the trades and industry specialties in which much larger proportions of men than women are enrolled. It is not clear to what extent this situation is amenable to control or influence by those responsible for educational policy, but it is clearly worthy of increased attention.

The positive earnings differentials for high school graduates of the vocational curriculum provide clearer justification for the program than ost earlier studies have provided. The fact that such advantages are confined to those individuals who



end up in training-related jobs suggests that the curriculum is advantageous primarily in providing job skills rather than (1) generalized work habits and attitudes that are attractive and profitable to employers or (2) general labor market skills that enable individuals to find better jobs; both of the latter types of advantages would produce a payoff irrespective of type of work.

However, the fact that the earnings advantages are confined to those in training-related jobs, coupled with the fact that this group constitutes only a minority of all vocational graduates, is disquieting, for it is indicative of inefficiencies, especially in view of the higher cost of vocational relative to "general" education. There is need to know more than is currently known about the reasons that so many vocational graduates enter lines of work that are apparently unrelated to their training. To the extent that it is lack of opportunity, the relevant policy objective is either to expand the number of jobs in the economy or to improve the match between the stucture of job opportunities and enrollments in the various vocational education specialties, or both. On the other hand, to the extent that it results simply from the choices of students and graduates, more effective counseling prior to and during the high school years is indicated. In any case, it is clear that on the basis of economic considerations alone it would be desirable to minimize the proportion of vocational curriculum graduates who fail to use their training in the labor market.

A final point may be offered, albeit more tentatively than any of the foregoing. Among the control variables that have been used in the analyses of educational and labor market outcomes, measures of self-esteem have particularly widespread explanatory power. Students with low self-esteem, as measured in the 10th grade, were more likely to graduate from the vocational than from the other curricula; they were less likely to pursue any education beyond high school and, among all those who did, were more likely to opt for vocational than for college programs. Among the college bound, they were more likely to opt for the 2- rather than the 4-year program. Finally, with education and other factors controlled, the youths who had scored low in self-esteem tended to earn less than those with better self-images.

Two quite separate policy measures are suggested by these findings. First, from the vantage point of the student, anything that can be done in the schools to improve self-concept among those with low self-esteem will tend to reduce inequalities in educational achievement and labor market rewards. However, to the extent that such efforts are successful, they would presumably lead to reduced enrollments in vocational education. The appropriate policy objective in this context is to change the substance and/or image of vocational education to make it no less attractive to self-perceived "winners" than to self-perceived "losers".



More concretely, a number of specific policies designed to achieve the objectives outlined in the preceding paragraphs may be offered as illustrations. All levels of government, in addition to individual schools themselves, would ideally be involved in their implementation.

Combatting Discrimination

- o The record suggests that civil rights legislation and executive orders have helped to reduce or eliminate racial and ethnic discrimination in the labor market, at least for the groups under consideration in this report. Continued vigorous enforcement of these policies is called for if the Jains that have been made are to be preserved.
- o Something more than these kinds of policies is evidently required if we are to erase the disadvantage experienced by women once they enter the labor market. School curricula, beginning with kindergarten, should be designed to describe the full range of occupational alternatives that are open to girls and boys. Particular emphasis, by means of specific examples and by introduction of role models, should be given to the changes that have been occurring in the roles of the sexes in the labor market as well as in other aspects of life.
- o School counselors must also play a role by "leaning over backward" to avoid being influenced by stereotypes that pervade the entire culture when they offer educational and labor market advice to young women and young men of all racial and ethnic backgrounds.

Discouraging Dropouts

Reducing the incidence of withdrawal from high school--and especially the above-average dropout rates of racial and ethnic minority group persons--calls for a wide range of measures:

o Continuing and strengthening antipoverty programs will help reduce the disadvantage with which large proportions of these youth enter the educational system, thus decreasing both the economic and psychological inducements to leave school.

- o Strengthening and expanding preschool and elementary school compensatory education programs should have a similar and more direct influence. There is ample evidence that Head Start, for example, contributes to the subsequent success in school of those who participate in it, but that existing programs accommodate only a small minority of those who are eligible for it. Other programs that have a history of success include migrant and bilingual education.
- o Strengthening the entire elementary and secondary school program to make it more exciting, meaningful, and equitable to all categories of students would yield the twin benefits of improving the performance of students and reducing the likelihood of their withdrawal prior to graduation.

Enhancing Self-esteem

Improving the self-esteem of students with poor self-images would improve their educational decisions as well as their subsequent experience in the labor market.

- o The measures described above that are designed to improve the school performance of children from economically deprived backgrounds would, as a consequence, tend to enhance their self-esteem.
- o In addition, conscious efforts to develop formal programs of rewards for a variety of kinds of achievement would operate both to motivate and to improve the self-image of students who may lack abilities and skills that have been traditionally rewarded, but who nevertheless have others that can legitimately be recognized. In this context, there is probably no substitute for conscientious and imaginative efforts by empathetic teachers to bolster the egos of those students in need of such help.

Strengthening Vocational Education

o Although secondary vocational education has the reputation of providing solid preparation for those who end up in training-related jobs, the fact that only a minority of graduates enter such jobs invites attention, especially in view of the greater cost of vocational education compared to general education. Researchers should examine the question of why graduates take jobs unrelated to their training. In



- addition, administrators of vocational programs should develop a means of maintaining contact with their graduates in order to ascertain whether the phenomenon can be explained by factors related to program characteristics that can be changed.
- o Vocational education administrators also need to give attention to improving the image of their programs. One way of doing this would be to identify graduates who have achieved success and to "advertise" them as role models (for example, Harry F. Silberman, Professor and Chair, College of Education, UCLA; Jimmy Carter, former President of the United States). Vocational education researchers should also assist by publishing in a crossdisciplinary fashion. Journals in business, general education, school administration, and other research disciplines should be targets for publication of research results.

APPENDIX A VARIABLE DEFINITIONS



(Definitions apply to both NLS-Youth and HS&R databases, unless otherwise indicated)

Race/ White, black, Hispanic, Native American, other ethnicity (Asian is also included in the HS&B descriptive tables) (majority white = reference group).

Gender Male, female (male = reference group)

Region Northeast, North Central, South, West (North Central = reference group).

Area of Rural or other (urban, suburban) (rural = 1). residence

Socioeconomic A created index of parents' occupation and educastatus (SES) tion as well as household items, for respondents at age 14.

Marital status Has the respondent ever been married (yes = 1). (HS&B)

Offspring Does the respondent have any children (yes = 1). (HS&B)

Limited A person is classified as limited English English proficient if one of the following is true: proficiency

- o In the 1979 interview, the respondent reported having trouble getting a good job because of a problem with English; or
- o The respondent was administered the interview in a language other than English in 1979 or 1980.

(LEP = 1)

(NLS-Youth)

(HS&B)

Limited A person is classified as limited English English proficient if one of the following is true: proficiency

- o The student had taken the Base-year questionnaire in Spanish; or
- o The student reported the first language spoken was one other than English, and
 - o reported taking an English course for non-English-speaking students (in grades 10 - 12); or



- o reported taking a reading and writing course in the first language spoken (not English) in grades 10 12; or
- o reported taking other subjects (math, science) taught at least in part in their first language spoken (other than English) in grades 10 12.

(LEP = 1)

Handicapped (HS&B)

A person is classified as handicapped if one of the following is true:

- o The student reported being in a special program for educationally or physically handicapped persons: or
- o The student possessed one or more of the following conditions: specific learning disabil: y, visual handicap, hearing impairment, deafness, speech disability, or orthopedic or other health impairment/physical disability, and reported having a limiting physical condition.

(handicapped = 1)

High school curriculum pattern

High school pattern was determined first by using student transcripts and, if this was not possible, by using a student's self-report.

In the descriptive information high school pattern is broken down into three categories as follows:

- O Vocational further broken down into Concentrator, Limited Concentrator, Concentrator/Explorer, Explorer, Incidental Personal
- o Academic
- o General

In the regression analyses, respondents in the Explorer and Incidental Personal areas were merged into either the Academic or the General pattern (General = reference group).



Student high school curriculum pattern using high schiol t anscripts

A student earning credit in any area of vocational education was categorized into one of the five patterns of Vocational Education: Concentrator, Limited Concentrator, Concentrator/Explorer, classification Explorer, or Incidental Personal. This is done in the following way. Each of the five patterns has values for intensity, diversity, continuity, supportive diversity, and prominity that are characteristic of an average member of that pattern. The differences between these characteristics and their corresponding values held by the student are computed and squared for each of the five patterns. The squared differences are summed within each pattern. The pattern with the lowest score is the classification given the student. An Explorer, however, may not hav _ specialty, so a student with a specialty who is closer to Explorer than any other pattern is assigned the next closest pattern.

> A student taking no vocational courses was classified as either Academic or General. There is a difference in definition of Academic between NLS-Youth and HS&B data. In NLS-Youth, if the student took 4 or more years of English, 3 or more years of Math, 2 or more years of Science and Social Studies; or 4 years of English, 2 or more years of Math, Science, and Social Studies ard 2 years of foreign language, then that student was classified as Academic. Ctherwise, the student was Gene al.

> In HS&B, a student taking no vocational courses was classified as either Academic or General. the student earned 3 or more credits in English; 2 or more credits in the areas of math, science, and social science; and 12 or more total credits in English, math, science, social science and foreign languag s, then that student is Academic. Otherwise, the student is General.

A student was classified as having "missing data" in HS&B if

- o the credit earned is missing for two or more courses; or
- o the transcript reports that a course was taken in a grade other than 9, 10, 11, or 12; or



- o eight or more credits were earned in 2 or fewer courses in 1 year; or
- o any course was worth five or more credits; or
- o more than 12 credits were earned in 1 year; or
- o more than 32 credits were earned in the 4 years of high school.

Verified self-report (HS&B) Verified self-report was used to determine a student's high school curriculum pattern when no transcripts were available or when the person's transcripts were invalid.

Selected questions in the first follow-up questionnaire were used to determine a student's curriculum as reported by that student. If the student reported taking 2 or lore years of course work in a single vocational area--pusiness, trade and industry, technical, or other (agriculture, health care, home economics, distributive education) -- that student was classified as having taken a "Vocational" curriculum pattern. If a student did not meet these requirements but reported taking coursework consisting of at least 3 years of English; at least 2 years of math, science, and social studies; plus an additional 3 or more years in English, math, science, social science, or a foreign language totaling 12 or more credits, then that student was classified as having talen an "Academic" curriculum pattern. If these requirements were not met and the student reported taking coursework in any of the Academic subjects, the student was classified as having taken a "General" curriculum pattern. A student who did nct meet any of the criteria for Vocational, Academic, or General was classified as having "missing data."

Specialty

No specialty--those in the Academic, General, Explorer, and some Incidental Personal curriculum pattern respondents.

Vocational specialties--Agriculture, Business, Health Care, Trade and Industry, Home Economics, and Distributive Education (marketing and merchandising).

Unclassifiable--those in self-report curriculum patterns.

(NLS-Youth)

Carnegie unit A Carnegie unit required that a class had been taken for an average of 1 hour a day, for 5 days a week, for 180 days.

(HS&B)

Carnegie unit A Carnegie unit required a minimum of 200 minutes for a regular class and 275 minutes for a lab class per week for 36 weeks. Some schools, however, may require more time for credit.

10th grade grade point average

Course credit for each course in the 10th grade was multiplied by the grade received for that course as follows:

A+, A = 4.0; A- = 3.7; B+ = 3.3; B = 3.0; B- = 2.7; C+ = 2.3; C = 2.0; C- = 1.7; D+ = 1.3; D = 1.0; D = 0.7(if a failed class was reported, then 1 credit was assigned for that failed class in NLS-Youth and 0.6 credit in HS&B).

These numbers were added together, then divided by the total number of credits for all 10th-grade courses taken.

education (NLS-Youth)

Postsecordary Currently enrolled AND one of the following:

- Completed 0 years
- o Completed 1 year
- 0 Completed 2 years
- Completed 3 years 0
- o Completed 4 or more years

Not currently enrolled AND one of the following:

- o Enrolled but did not complete 1st year
- Completed 1 year 0
- o Completed 2 years
- o Completed 3 years
- Completed 4 or more years

(never enrolled = reference group)

Postsecondary education: current enrollment status (HS&B)

Currently enrolled, not currently enrolled (never enrolled = reference group)

education:

Postsecondary o Completed O years

years

o Completed 1 year o Completed 2 years

completed (HS&B)

o Completed an indeterminate number of years.

(never enrolled = reference group)



Ability Armed Forces Qualification Test (AFQT) score. (NLS-Youth) Composite of reading, vocabulary, and math scores Ability (HS&B) from tests administered with survey. School An index based on a student's attitude toward attitude various aspects of current school (e.g. Does (NLS-Youth) student feel safe at school? Do teachers have knowledge of subject areas?). Absenteeism How many days the respondent was absent from (HS&B) school for reasons other than illness. Discipline Did the respondent have disciplinary problems in problems school (yes = 1).(HS&B) Trouble with While in school, was the respondent ever in the law trouble with the law (yes = 1). (HS&B) Self-esteem Additive score of various self-esteem questions asked of students in the 10th grade in HS&B and in 1981 in NLS-Youth. High values correspond with high self-esteem. Locus of Additiva score of various questions dealing with control the amount of control respondents feel they have (HS&B) over their lives. High values correspond with feelings of being in control. Training-A person's occupation and industry area were related (TR) determined based on the Census Bureau's threedigit code for occupation. If that person's vocational specialty matched the occupation area or a combination of occupation and industry, the person was designated as being in a trainingrelated area of work. Occupation | What is the respondent's occupation. (HS&B)

What is the respondent's occupation.

Farm laborer, farmer, professional-technical,
manager, sales clerk, craft, operator (machinery)
manual laborer, service, physical human services.

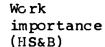
Full-time employment

A person worked an average of 30 hours or more per week, includes students.

Part-time employment A person worked at least 5 hours per week, but less than 30.



Tenure The number of months (NLS-Youth) or weeks (HS&B) a person has worked at current or most recent job. Log hourly Log of reported hourly rate of pay. rate of pay Log monthly Log of reported monthly rate of pay. rate of pay Labor market Number of weeks worked since age 16. experience (NLS-Youth) Number of weeks worked since graduation from high Labor market experience school or, if no graduation date was available, (HS&B) from the date of 18th birthday. Weeks in the Number of weeks since year after graduation or labor force year after turning 18 looking for work or (NLS-Youth) employed. Percent of Number of weeks employed since year after weeks worked graduation or year after turning, 18 divided by (NLS-Youth) the number of weeks in the labor force. Percent of Number of weeks in labor force divided by the time available number of weeks since year after graduation or in the labor year after turning 18. force (NLS-Youth) Work A created index of the importance of the following composite questions to the student in high school: success in work, having a lot of money, and finding steady (HS&B) work. Work in Whether the respondent held a job while attending high school high school (yes = 1). (HS&B) Enjoy work Whether student reports work is more enjoyable (HS&B) than school (yes = 1). Luck more Whether student thinks luck is more important important than work (yes = 1).



than work (HS&E)

Whether student thinks work is more important than school (yes = 1).



Plan to work first year out of high school (HS&B) Whether the student plans to work the first year out of high .chool (yes = 1).

Eighth grade aspirations

Whether the student planned to go to college in the eighth grade (yes = 1).

Work 35 (NLS-Youth)

Whether students reported in the 10th grade that they expected to be working (full-time or part-time) at age 35 (yes = 1).



APPENDIX B EFFECTS OF SCREENS



TABLE B.1

THE EFFECTS OF SCREENS ON NLS JAMPLE SIZE

		WI	nite	В	lac k	His	panic	<u>Native</u>	American	<u>01</u>	her
	Total	Male	Female	Male	Female	Male	Female	Male	Female	Main	Female
Total Sample (Military excluded)	11367	2477	2594	13 69	1 425	932	996	237	295	533	509
Less: Nongraduates	3452	672	557	520	377	450	403	108	124	145	96
Total Remaining Sample for Analysis	7915	1805	2037	849	1 048	482	593	129	171	388	413



TABLE B.2

RACE/ETHNICITY AND GENDER BY SCCIOECONOMIC STATUS

Frequency and Percent

Total Sample

NLS

Race/Ethnicity					
and Gender	Total	Low	2d	3đ	Higi
White					
Male	2477	373	555	687	862
	21.79	15.06	22.41	27.74	34.80
Female	2594	391	595	715	893
	22.82	15.07	22.94	27.56	34.43
Black					
Male	1369	336	459	381	193
	12.04	24.54	33.53	27.83	14.10
Female	1425	4 09	418	371	227
	12.54	28.70	29.33	26.04	15.93
<u>Hispanic</u>					
Male	932	497	199	123	113
	8.20	53.33	21.35	13.20	12.12
Female	996	516	217	154	109
	8.76	51.81	21.79	15.46	10.94
Native American					
Male	237	73	77	50	37
	2.08	30.80	32.49	21.10	15.61
Female	295	83	99	76	37
	2.60	28.14	33.56	25.76	12.54
<u>Other</u>					
Male	533	82	110	153	188
	4.69	15.38	20.64	28.71	35.27
Female	509	82	112	132	183
	4.48	16.11	22.00	25.93	35.95
Total	11367	284 2	2841	2842	284 2
	100.00	25.00	25.00	25.00	25.00

NOTE: Percentages and numbers are unweighted.

TABLE B.3

RACE/ETHNICITY AND GENDER BY SCCIOECONOMIC STATUS

Frequency and Percent

Remaining Sample

NLS

Race/Ethnicity					
and Gender	Totai	Low	2d	3d	нigi
White					
Male	1805	156	337	535	777
	22.80	8.64	18.67	29.64	43.05
Female	2037	211	415	592	819
	25.74	10.36	20.37	29.06	40.21
<u>Black</u>					
Maie	849	187	2 60	251	151
	10.73	22.03	30.62	29.56	17.79
Female	1048	264	280	289	215
	13.24	25.19	26.72	27.58	20.52
<u>Hispanic</u>					
Male	482	216	100	71	95
	6.09	44.81	20.75	1 4•73	19•71
F em ale	593	259	1 24	101	99
	7•49	45.36	20.91	17.03	16.69
Native American					
Male	1 29	27	9ر:	31	32
	1.63	20.93	30,23	24.03	24.81
F ema le	171	35	52	54	30
	2.16	20.47	30.11	31.58	17.54
<u>Other</u>					
Maie	388	36	68	111	173
	4.90	9.28	17•53	28.61	44.59
Female	413	48	79	115	171
	5•22	11.62	19•13	2 7•85	41.40
Total	7915	1449	1754	2150	2562
	100.00	18.31	22.16	27.16	32.37

NOTE: Percentages and numbers are unweighted.

TABLE B.4

THE EFFECTS OF SCREENS ON HS&B SAMPLE SIZE.

			nite	<u>B</u>	<u>lack</u>		panic		American		<u>i an</u>		ther
	Totai	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Total Sample	29 737	9608	9687	1825	2089	2680	2540	173	1 49	218	230	321	217
Less: Private school students	3642	1229	1 188	210	236	269	386	10	9	21	36	21	27
Remaining Sample	26095	8379	8499	1615	1853	24:1	2154	163	1 40	197	194	300	190
Less: Nongraduates	2834	778	718	258	215	356	325	40	33	15	12	55	29
Remaining Sample	23261	7601	7781	1357	1638	2055	1829	123	107	182	182	245	161
Less: Students with unclassifiable grades	12	2		1	2		2					2	3
Remaining Sample	23249	7599	7 781	1356	1636	2055	1827	123	107	182	182	243	158
Less: Students with missing credits	10	4	2	1		1	1		·••				1
Remaining Sample	23239	7595	7779	1355	1636	2054	1826	123	107	182	182	243	157
less: Stu⊄ants with out⊶ of=range credits	5	3			1		1						
Remaining Sample	23234	7592	7779	1355	1635	2^54	1825	123	107	182	182	243	157
Less: Students with no transcripts and unclassifiable self-report data	947	267	180	61	55	60	38	4	3	5	8	161	105
Total Remaining Sample for Analysis	_2287	732 5	7599	1294	1580	1994	1787	1 19	104	177	174	82	52

TABLE B.5

GENDER AND RACE/ETHNICITY BY SCCIOECONOMIC STATUS

Frequency and Percent

Total Sample

HS&B

Race/Ethnicity						
and Gender	Total	Low	2d	3d	нfgh	Missing
White		-				
Male	9608 32 . 31	1349 14.04	1970 20 . 50	2339 24.34	2752 28.64	1198 12 . 47
Female	9687 32.58	1631 16.84	2213 22.85	2274 23.47	2602 26.86	967 9•98
<u>Black</u>						
Male	1825 6-14	61 1 33.48	423 23•18	265 14 . 52	160 8•77	366 20.05
	0.14	JJ•40	23.10	14.52	0.77	20.03
Female	2089	851	448	320	150	320
	7.02	40.74	21.45	15.32	7.18	15.32
Hispanic					24.0	470
Male	2680 9•01	1 0 2 0 3 8 • 0 6	545 20 . 34	414 15•45	269 10.04	432 16.12
Female	2540 8.54	1096 43 . 15	479 18•86	338 13.31	223 8.78	404 15 . 91
	0.74	43613	10100	1,505.	00	,,,,,,
Native American	173	48	25	35	22	43
Male	•58	27.75	14.45	20.23	12.72	24.86
	1.00	46	26	70	12	35
Female	1 49 •50	46 30•87	17.45	30 20 . 13	12 8 . 05	23.49

Asian Male	∠18	32	50	55	66	15
na ro	.73	14.68	22.94	25.23	30.28	6.88
Female	230	45	44	46	70	25
1 Alla 10	.77	19.57	19.13	20.00	30.43	10.87
Other_						
Male	321	12	8	8	10	283
	1.08	3.74	2.49	2.49	3.12	88.16
Femaie	217	11	3	10	5	188
	•73	5.07	1.38	4•61	2.30	86.64
Total	29737	6752	6234	61 34	6341	4276
	100.00	23.71	20.96	26.63	21.32	14.38

DTE: Remonstrates and numbers are unweighted.

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TABLE B.6

GENDER AND RACE/ETHNICITY BY SCCIOECONOMIC STATUS

Fraquency and Percent

Remaining Sample

HS&B

Race/Ethnicity						
and Gender	Total	Low	2d	3d	High	Missing
White						
Male	73 25	1 258	1798	2071	2039	159
	32.87	17.17	24.55	28.27	27.84	2.17
Female	75 99	1496	2004	1960	2056	83
	34.10	19.69	26.37	25.79	27.06	1.00
B lac k						
Male	1 294	566	356	207	105	60
	5.81	43.74	27.51	16.00	8.11	4.64
Female	1580	777	380	255	113	55
	7.09	49.18	24.05	16.14	7.15	3.48
Hispanic						
Male	1994	931	485	339	197	42
	8.95	46.69	24.32	17.00	9.88	2.11
Female	1787	974	393	248	142	30
	8.02	54.50	21.99	13.88	7.95	1 • 68
Native American						
Male	119	45	22	30	19	3
	0.53	37.82	18.49	25.21	15.97	2.52
Female	104	45	21	25	10	3
	2.47	43.27	20.19	24.04	9.62	2.88
Asian						
Male	177	28	48	48	51	2
	0 .7 9	15.82	27.12	27.12	29.81	1.13
Female	174	40	39	39	52	4
	0.78	22.99	22.41	22.41	29.89	2.30
Other						
Male	82	10	5	7	7	53
	0.37	12.20	6•10	8.54	8.54	64.63
Female	52	10	1	9	3	29
	0.23	19.23	1.92	17.31	5.77	55.77
	**					_
Tot al	22287	6180 27.73	5552 24.91	5238	4734	525
	100.00	21.13	24.91	23.50	21.51	2.35

NOTE: Percentages and numbers are unweighted.

RESTRUPTION OF SEASON

APPENDIX C

SUPPLEMENTAL TABLES

These tables present complete specifications for tables 14-28 in the text and are numbered the same to facilitate reference.



HS&B, PERCENT OF TIME IN THE LABOR FORCE

	поа		I OF TIME I	N INE HABOK	TORCL
DEP VARIA	BLE				
		SUM DF			
SOURCE	DF	SQUARES		F VALUE	PROB) F
MODEL ERROR 6	58	78.019738		15. 132	9.0001
_	040	536. 925			
C TOTAL 6		614.944		_	
ROOT DEP M		0.250152		0.126 3	
C.V.	EHN	0.470643 63.34997		0. 1185	
C. V.		63. 3433/			
		PARAMETER	STANDARD	T 505 46	
VARIABLE	DF	ESTIMATE		T FOR HØ: Parameter=0	
***************************************		COLIMATE	ERROR	PHRHME I EK=4	PROB > !T!
INTERCEP	1	0.394141	0. 034923	11.286	0.0004
CONC	ī	e. 023028		1.615	0.0201
LIMCON	1	0.018328		1.540	0. 1064 0. 1237
CONEXP	1	-0.311817		-0. 837	0. 4027
MDTRANS	1	-0.054715	0.047389	-4. 155	0. 2483
ACAD	1	-0.043433	0.014448	-3. 606	0.0027
SRVOC	1	0.029749	0.017110	1. 739	0.6821
SRACAD	1	0.008467472	0.027528	0. 308	0.7584
CONTR	1	0.095661	0.023543	4.063	0.0001
LIMCONTR	1	0. 115488	0.022771	5.072	0.8001
CONEXPTR	1	0. 063560	0.031413	2. 023	. 0.0431
INDVOC	1	J. 094586	0.086928	1.088	. 0.2766
HI 3PM	1	-0.014369	9. 0167 3 1	-0. 660	0. 3896
NATM	1	-0.144176	0. 032446	-4.444	0.0001
BLM	1	-0.098505	0.017530	-5. 619	0.0001
OM	1	-0.055561	0.026717	-2 . 0 80	0.0376
HISPF NATF	1	- 0. 057932	0.017005	-3. 407	0.0007
BLF	1	-0.181106	6.036583	~4.951	0.0001
WHF	1	-0.125984	0.016348	·-7. 7 0 7	0.0001
OF.	í	-0.013957 -0.053291	0.010276	-1.358	0.1745
HC 13	i	-0.00933087	0.026239 0.012171	-2. 03 1	0.0423
MDH 1/4P	ī	-0.089779	0. 159714	-0. 767	0.4433
F'+G2LANG	ī	-0.035792	0. 022163	-0.562 -1.615	0.5741
MDENSLAN	1	0.046979	0.028928	1.624	0.1064
SES	_	-0.000767597	0.006200859	-0. 124	0.1044 0.9815
MDSES	1	-0.017336	0.061420	-0. 282	0. 7778
EPST	1	-9.00727978	0.011979	-0.608	0.5434
SOLITH	1	-0.00731482	0. 010696	-0.634	0.4941
WEST	1	-0.011138	0. 012751	-0.874	0.3824
TEST			0.0006190106	1.518	0.1290
MDTEST	1	0.013461	0.034525	0. 390	€. 6966
ENROLL	1	-0.03664	0.011944	-3.068	0.0022
POSTØ POST1	1	-0.050138	0.013498	-3.714	0.000 2
P0511	1	-0.103158	0.015358	-6.717	0.0001
INDETER	1	-0.123595	0.028617	-4.319	0. P001
MDPOST	1	-0.047435 -0.094220	0.013682	-3. 467	P J005
WORKCOMP	i	0.010877	0.02789 <u>;</u> 0.005817709	-3.378	6.0007
MDWKCOMP	ī	0.122357	0.064453	1.870 1.898	0.0616 0.0577
EIG.IT	1	-0.00719721	9.009390675	-0.766	0, 0577
MDE I GHT	1	-0.016523	0. 013045	-1.267	0. 4435 0. 2053
GPA10	1	0.020449	0.006473532	3. 159	0.0016
MDGPA10	1	-0.026034	0.0 16272	-1.600	0.1097
WORKINHS	1	0.149441	0.010256	14.571	Ø. 0001
MDHSWORK	1	~0.368991	0.05 6179	-6.568	0.0001
SPOUSE	1	0.003409188	0.	0. 235	0.8142
KID	1	-9. 12 0 484	0.016753	-7. 192	0.0001
URBRURAL SELFEST	1	-0.038133	0.006081468	-4. 719	0.0001
MDSLFEST	1	-0.00244574	9.005 576569	-0.474	0.6352
LOCOFCON	1	-0.' 26 0. 1143	0.150295	-0.108	0.9140
MDLOCCON	i	0. 048258	0.0 06798944 0. 139342	1.677	0.0936
ABSENT		-0. 0009 ₁ 1501	0. 139342 0. 003186115	0. 346 -0. 286	7291
MDABSENT	1	0.218321	0. 145645	1.499	0.7748 0.1339
DISCIPPR	1	-0.047001	0.012208	-3. 85 0	0.1339 0.0001
MDDISPRB	1	-0.040672	0.050190	-0.810	0. 4178
LAWTRBLE	1	-0.019243	0.020939	-0. 919	0.35 8 1
MDLAWTRL	1	-0.054206	0.046276	-1.171	P. 2415
					



TABLE C.14

NLS, PERCENT OF TIME IN THE LABOR FORCE

DEP VARIABL	E: PCTILF			
	SUM OF	MEAN		
SUURCE D			F VALUE	PRUB) F
	9 97.502158		34. 170	7.0001
EKROR 691				, ,
C TOTAL 695				
ROOT MS		R-SQUARE	0.1616	
DEP MEA			0.1569	
C. V.	36.29013		0.000	
	00. 20012			
	PARAMETER	STANDARD	T FOR HO:	
VARIABLE D		ERROR	PARAMETER=3	PROB > !T!
INTERCEP	1 0.758216	0.033220	22.824	0.2001
SES	1 -0.000379893	0004616317	-0.823	9.4106
NEAST	1 0.008915636	0.010130	0.880	0.3788
HTUCS	1 -0.00284671	0.008715557	-0.327	0.7440
WEST	1 -0.00286284	0.610396	-0.275	0.7830
RURAL	1 -0.00611795	0.010383	-0.589	e 5557
AFQT	1 0.0008865795		3.528	0, 004
CONC	1 0.035804	0.012456	2.874	0.0041
LIMCON	1 0.022734		2.199	0.0279
CONEXP	1 0.013817		1.082	0.2792
ACAD	1 -0.037111	0.011484	-3. 232	6.0012
SRVOC	1 0.001441314	0.016918	0. 085	0.9321
SRACAD .		0.013390	1.280	0. 2005
ENG	1 -0.068453		-4. 433	Ø. 0001
MDTRANS	1 -0.067458	C. 051055	-1.321	0.1865
MDRURAL	1 -0.307785		-20.732	0.0001
MDAFQT	1 -0.098835	y. 016422	-6.019	0.0001
HISM	1 0.004941268		0.313	0.7545
BLM	1 -0.047557		-3. 558	0.0004
NATM	10.025739		-0.941	0.3468
DM	1 -0.00468739		-0. 291	0.7711
HISF	1 -0.060580	0.014895	-4.067	0.0001
BLF	1 -0.113129	0.012651	-8. 943	0.0001
NATF	1 -0.104434	0. 022663	-4.608	0.0001
WHF	1 -0.057185	0.009440631	-6.057	0.0001
OTHE	1 -0.00566296	0. 015887	-0.356	0.7215
SESTEEM		0.0008856179	1.476	0.1399
MDESTEEM	-0. 123989	0. 018268	-6.787	0.0001
NEPOST2	-0.0 23618	0.013775	-1.715	0.0865
NEPOST3	1 -0.150295	0.0 23666	- 6. 351	0.0001
NEPOST4M	1 -0.166089	0.0 13198	-12 . 5 85	0.0001
GPA10	1 0.002404707	0.005470505	0.440	0.6603
MDGPA1@	1 -0.043478	0.010336	-4. 207	0.0001
NEPCS 10	1 -0.00969357	0.012639	-0.767	0.4431
NEPOST1	1 -0.018947	0. 012455	1.521	0. 1282
PG E 10	1 0.030736	0.019851	1.548	0.1216
POST1	1 -0.044278	0.013850	-3.1 9 7	0.0014
POST2	1 -0.125082	0.015072	-8.299	0.0001
POST3	1 -0.158787	0.017061	-9.307	0.0001
POSTGTE4	1 -0.264782		-12.063	0.0001
		134		



HS&B, PERCENT OF WEEKS WORKED

DEP VAR	IORI F	PCTWKED			
DEF VINIT		SUM OF	MEAN		
SOURCE	DF	SQUARES		F VALUE	PROB) F
MODEL	58	17. 396153		6. 839	0.0001
ERROR C 101AL	5356	234.901 252.297	0.043857		
	T MSE	Ø. 209422		ବ. ଉତ୍ତେଶ	
	MEAN	0.923105		1. 0589	
c.v.	,	22. 68666			
					•
VARIABLE	E DF	PAPAMETER ESTIMATE		T FOR HO: PARAMETER=9	
AHUIABLE		ES: 1MH (E	ERROR	PHRHME I ER=0	PROB > !T!
INTERCER	1	0.842761	0.026179	32.192	0.0001
CONC	1	0.005612162		0. 529	0.5965
LIMCON	1	-0.011102	0.008866439	-1.252	0.2106
CONEXP	1	-0.010855	0.010622	-1.022	0.3069
MDTRANS ACAD	1	9. 056440 -0. 00615464	0.036886 0.010854	1.530 -0. 567	0. 1260
SRVLO	i	e. 0206361444	0.012849	-0. 567 0. 065	0.5707 0.9481
SRACAD	1	-0.019897	0.020304	~ø. 980	0. 3272
CONTR	1	0.032873	0.016735	1. 9 64	0.0495
LIMCONTR	-	0.027371	0.016136	1. 596	0.0899
CONEXPTR	₹ 1 1	0.019363 -0.082271	0.022579	0. A58	0.3912
HISPM	1	9.010042	0.063671 0.012459	-1.292 0.806	0. 1964 0. 42 0 3
NATM	i	-0.022345	0.025099	-0. 890	0. 3734
BLM	1	-0.023768	0.013225	-1.797	0.0724
C :	1	0.008203135	0. 020657	0. 397	Ø. 6913
HISPF	1	-0.025008	0.012671	-1.974	0.0485
NATF BLF	1	-0.0045986 -0.046093	0.030216 0.012602	-0. 152 -3. 6 5 8	0.8796
WHF	î	-0.00652467	0.007541663	-0.087	0.0003 0.93 11
OF	1	-0. 10446872	0.019955	-0. 224	0. 8228
HCAP .	1	0.006151209	0. 639 133184	0.674	0. 5007
MDHCAP	1	-0.021637	0. 113832	-0.19 <i>0</i>	0.8493
ENG2LANG MDEN2LAN	_	-0.00773988	0.017009	-0. 435	0.6491
SES	1	-0. 036631 -0. 200736732	0.021313 0.004676786	-1.719 - 0. 158	9. 9857
MDSES	i	-0.054149	9. 048.353	-1. 12 0	0.8748 0.2628
EAST	1	0.004482416	0.008963631	9. 500	0.6170
SOUTH	1	0.007052882	0.008009194	0. 881	0.3786
WEST	1	-9.00312761	0.909467512	-0. 330	0.7417
TEST MDT ES T	1	0.001024891 -0.015115	0.0004623277 0.025656	2.217 2.700	0.0267
ENROLL	i	0.004878176	0.008846704	~0. 589 0. 551	0.5558 0.5814
POST O	1	-0.024259	0.009950175	-2. 43B	0. 3514 0. 0148
POST1	1	-0.051857	0.011356	-4.566	0.0001
POST2	1	-0.050040	0.021431	-2. 335	0.0196
INDETER	1	-0.015096	0.010116	-1.492	0. 1357
MDPUST WORKCOMP	1 1	-0.025892 0.0008262529	0. 621054 0. 004357617	-1.230 0 .1 90	0.2188
MDWKCOMP	_	0.088775	0.049530	1.792	0.8496 0.0731
EIGHT	,i	0.003218095	0.006986163	0.461	0.6451
MDEIGHT	1	0.011517	0.009914988	1. 173	0.2407
GPA10	. 1	0.011548	0.004854373	2.379	0.0174
MDGPA10 WORKINHS	1	-0.028231 0.034397	0.01236a	-2.279	0.0227
MDHSWORK	_	-0. 034397 -0	0.00797895 0.070634	4.312 -13.145	0.0001 0. 60 01
SPOUSE	i	-0.019127	0.010835	-13.143 -1.765	0. 0776
KID	1	-0.069336	0.013063	-5. 300	0.0001
URBRURAL	_	-0.000653107	0.006033259	-0. 108	6.9138
SEL FEST	1	-0.010977	0.004162177	-2.637	0.0084
MDSLFEST LOCOFCON		-0.043122 -0.000953925	0.107305 0.005079073	-0. 402 -0. 188	0.6878
MDLOCCON		0.115376	0.098179	1.175	0.851 8 0.2400
ABSENT	1	0.002767927	0.002380061	1. 163	0.2449
MDABSENT		0.011452	0.102887	0.112	0.9111
DISCIPR		-0.011241	0.009171786	-1.226	0.2204
MDDISPRB LAWTRBLE		-0.046985 -L.223328	0. 038 1 0 1 0. 9 1 5 5 2 4	-1.233 -1. 50 3	0.2176 0.1339
MDLAWTRL		-0. 1 02 307		-1.363 2.870	9. 1338 9. 0041
	-		135		•
			100	180)



1 E O

NLS, PERCENT OF WEEKS WORKED

DEP VARIA	a F.	PCTMKED			
<i>52.</i>		SUM OF	MEAN		
SOURCE	DF	SQUPRES		F VALUE	PROB/F
MODEL	39	42. 958926	1.101511	24. 955	0.0001
	770	298.827		L7. 300	0.0001
C TOTAL 68		341.786	V. 677176		
ROOT N		0.210095	R-SQUARE	0.1257	
DEP ME		0.851239	ADJ R-SQ		
C. V.	- MIN	24.68107	שה-א נעא	0.1207	
L. V.		24.00107			
		PARAMETER	STANDARD	T FOR HØ:	
VARIABLE	DF	ESTIMATE	ERROR	PARAMETER=0	PROB > !T!
***************************************		COTINATE	CARON	COVERE LEV-6	PROB 7 . 1 .
INTERCEP	1	0.533424	0. 026036	24. 329	0.0001
SES	1	0.001522463	0.0003620123	4.206	0.0001
NEAST	1	0.016536	0.007951086	2.080	0.0376
SOUTH	1	0.038730	0.006846282	5. 657	0.0001
WEST	1	0.022454	0.008131894	2. 761	Ø. 0058
RURAL	1	-0.020182	0.008141646	-2. 479	Ø. 0130
AFCT	1	0.001407516		7. 123	0.0001
CONC	1	0.040781	0.009759926	4. 178	0.0001
LIMCON	1	0.015646	0.008107497	1. 930	0.0537
CONEXP	1	0.034284	0.010009	3. 425	Ø. 0006
ACAD	1	-0.00683439	0.008992302	-0.760	0. 4473
SRVOC	1	0.025079	0.013419	1.869	0. 4473
SRACAD	1	0.015864	0.013419 0.010538	1. 505	0. 1323
ENG	i	-0.00947116	0. 012199	-0. 776	
MDTRANS	1	0.034893	0.042349		Ø. 4376
				0. 865	0. 3872
MDRURAL MDAFOT	1	-0. 020296	0.012131	-1.673	0.0944
HISM	1	0.016844	0.013047	1.251	0. 1967
	1	-0.00831094	0.012416	-0.669	0.5033
BLM NATM	1	0.038918	0.010531	-9. 393	0.0001
	1	-0.018415	0.021636	-0.851	0.3947
OM	1	-0.00317403	0.012624	-0. 251	0.8015
HISF	1	0.011403	0.011674	0. 977	0. 3287
BLF	1	-0.140526	0.009948369	-14.126	0.0001
NATE	1	-0.059141	0.017811	-3. 320	0.0009
WHF	1	-0.011081	0.007392736	-1.499	0. 1339
OTHI	1	0.021660	0.012427	1.743	0.0814
SESTEEM	1		0.00 36939424	3. 797	2. 0001
MDESTEEM	1	0.011301	0. 014657	0. 771	0.4407
MEPOST2	1	0.0 26361	0.010756	2. 451	0.0143
NEPOST3	1	0. 039798	0. 018577	2.1+2	0.032 2
NEFOST4M	1	0. @15951	0.010312	1.547	0.1219
GPA10	1	0.012154	7. 604 3 01163	2 . 8 26	0.0047
MDGPA10	1	-0.00817206	0. 008125976	-1.006	0. 3146
NEPOSTØ	1	-0.00683196	0.009933859	-0.688	0.4916
NEPOST1	1	0.010614	0.00975 6 0 29	1.088	Ø. 2767
POSTØ	1	0.00277164.2	0. Ø15582	P. 178	0.8588
POST1	1	-0.00426864	0.010911	-0.391	0.6956
POST2	1	-0.00588175	0.011827	-0.497	0.6190
POST3	1	0.021987	0.013306	1.652	0.0985
POSTGTE4	1	-0.00546435	0.01/ <i>39</i> 45	-0.317	0.7514



TABLE C.15

HS&B, SPECIFICATION 1, HOURLY EARNINGS

DEF VARIABLE	E: LNHRPAY			
SOUPCE DI	SUP CF SQUARES	, anne Menn	F VALUE	PROB>F
POTEL 73 ERPCR 422 C TOTAL 430	75.578527 7 491.149 0 566.748	1.035596	8.913	0.0001
PCOT MSI DEP MEAI C.V.	0.34C872 1.473047 23.14058	ACJ R-SC	0:1334 0:1164	
VAPIAPLE DE		STANDAFD	T FOR HO: PARAMFTER=0	PRC3 > 1T1
P S PP GA P P P ALL S P E T STATELLE STORE P P ALL S P E T STATELLE STORE P P ALL S P E T STATELLE STORE P P ALL S P E T STATELLE STORE P P ALL S P E T STATELLE STORE STATELLE STAT	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	# 4417337#37#37#37#4#1723040007#164#93347#3#203990 75#201#39##1722521#357#7#7#7#4#4++++*# # 0749997#37#57#57#57#57#57#4#4+++** # 084997#37**********************************	6932278955877774308550206271795269890 66999958584645547984756664628.244237733551842323446288779366441019987184628999958584646377271364851851846280999958584663772713648518518462809999585846637727136485185184628099995858406463772713648528030033144699999585846280199877155749623030033144699999585846637727136485280300331446999995858466377271364852803003314469999958584663772713648528030033144699999585846637727136485280300331446999995858466377271364853648528030033144699999585846637727136485280300331446999995858466377271364963772713648637727147147147147147147147147147147147147147	1965597211118887442182543114317110143948861 17480883253930337511;731611130322 08104655500458132054314317110143948865 177480880055395039000777552 0810465250045813220503000749514949876777 7 8148870000745357 08148870000745357 08148870000745357 08148870000745555 081487771100060449110000074555 08148777110006000076000076555 081487771100060000076000076555 08148777110006000000000000000000000000000000



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HS&B, SPECIFICATION 1, MONTHLY EARNINGS

DEP VARIABLE	E: LNMTFFAY			
SOURCE D	F S FES	MEAN	F VALUE	PRO8>F
POTEL 77 ERFOR 435 E TOTAL 436	113.762 6 662.473	0:134543	11.583	0.0001
Prot MSI DFP MEAI C.V.	0.366000 6.635145 5.526144	P-SQUARE ACJ R-SQ	0.1667 0.1523	
VARTAPLE CI		STANCAPT ERRCR	T FOF HO: PARAMETER=0	PRO8 > [T]
F CHARLEST BY ALCONOMINATION NO PROPERTY FOR A PROPERTY OF THE	223 C C C C C C C C C C C C C C C C C C	7932734411124 C1125946983941197444481978877581147732412624714121478241877766906666676745991414121478784187776676767750775878741414147778417841787766991414121474174577861877897777617787878777771411878777777777777777	2114688769345774502353731753444650944936235124854376323919187510009669471000000000000000000000000000000000000	127402063118999109617533616541141518172895777257438465573454261161304114377600587410861205750082617088768768768765772757578989436814801522000527450060060061738348406848077275757878949368148015220005274500617383484068480712507978784381681680093300017579600000000000000000000000000000000000

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HS&B, SPECIFICATION 2, HOURLY EARNINGS

DEP VARIA	LE: LNHRPAY			
BOU'RCE	BUM OF BOLLORES			
MODEL	79 75.735067		F VALUE 9.321	PROB) F 0.000 1
	30 491.013		3. 361	0. 0001
C'TOTAL 43		1		
ROOT M			0. 1336	
C. V.	23. 12916		0.1193	
•				
	PARAMETER		T FOR HO:	
VARIABLE	DF ESTIMATE	ERROR	PARAMETER=0	PROB > !T.
INTERCEP	1 1.378368	0.050219	27, 447	0.0001
CONC	1 -0.00529715	9. 918848	-9. 281	¢ 7787
LIMCON CONEXP	1 -0.017290		-1.052	ə. 2931
MDTRANS	1 -0.00234763 1 -0.045506		-0.122	0. 9026
ACAD	1 -0.00742543	0.00000	-0. 660 -0. 335	t. 5094 0. 7380
SRVOC	1 0.051429		2. 209	6.8272
SRACAD CONTR	1 0.014399 1 0.111803		0.358	9. 7293
LIMCONTR	1 0.119760		4. 036 4. 4 0 7	8. 80 01 8. 63 01
CONEXPTR	1 0.196596		2. 903	6. 66 37
HISPM NATM	1 9.8269 69		1.292	0. 1965
BLM	1 -0.062731 1 -0.00126713	0. 643587 0. 623796	-1.439	6. 1502
04	1 -0.017390		-9. 953 -9. 418	9. 95/5 9. 6763
HISPF	1 -0.055991	6.025270	-2, 216	0.0268
NATF BLF	1 -0.009078 1 -0.061203	0.0553 17	-1.610	6. 1074
WIF	1 -0.691790	0. 026994 0. 015610	-2. 267 -5. 880	9. 9234 8. 8001
OF	1 -0.029531	9. 845987	-0. 655	9. 5125
HCAP	10.035533	9.016645	-2. 1.5	. e. e328
MDEN2LANG	1 0. 914383 1 9. 96523726	0.031514	9, 456	9. 6481
SES	1 0.035963	0. 841695 9. 866 728734	0. 156 4. 0 21	6. 8757 6. 98 01
MDSES	1 -0.188657	0. 984497	-9. 233	0.0236
EAST SOUTH	1 0.015075 1 0.006926689	0.016466	6. 915	0. 3630
WES1	1 0.006926689 1 0.044783	0. 014536 0. 017282	0. 477 2. 591	0. 6337
LMEXP		0.0002160993	6. 448	0.00% 8.0001
MDLMEXP	1 -0.077629	0.052130	-1.489	0.136!/
TENURE MDTENURE	1 0000751949 1 -0. 00972808	0.000206088	-0. 365	8.7152
TEST		9. 063282 9. 0988264695	-9. 134 9. 284	0. 8776 0. 7763
MOTEST	1 0.055115	0. 045589	1.209	9. 2267
ENROLL POSTO	1 -0.027910	0.016659	-1.675	0. 0939
POST1	1 9.8 24237 1 8.8 44768	8. 016956 8. 021054	1.429	0. 153°
PGST2	1 0.012882	0.046942	2. 126 €. 257	0. 033± 9. 796\$
INDETER	1 0.034755	0.017388	1. 999	0.0457
I'ORKCOMP MDHKCOMP	1 0.010127 1 0.105749	0.008888884	1.252	0. 21 0 5
	1 0.105749 1 0.000 6322794	9. 985551 8. 9125 9 £	1.236	0.2165
	1 9.024022	0.017388	6. 05 1 1 . 38 2	0. 9 597 0. 1672
	1 0.007536581	0.008389674	0. 848	0.3966
	1 8.027820 1 8.018754	₹ 023254	1. 195	0.2317
	1 0.047598	0. 0165/,2 0. 01 ⁻⁷ /24	1. 134 2. 686	6. 2570 6. 6673
	1 -0.00602884	8. S22218	- 0 , 271	9. 7861
	1 -0.014539 1 -0.0165.0	0.011075	-1.313	0. 1893
	1 -0.0185.6 1 9.055940	0. J31509 0. 033536	-0. 587 1. 668	0. 5569
	1 -0.114264	0. 625785	-4. 431	0. 0954 8. 60 01
	1 -0.041511	0.021926	-1.893	0. 0584
	1 -0.08 2489 1 0.086846 755	0.021725	-3. 797	e. 9001
	0. 454521	0. 0 22165 0. 19 6 229	e. 3 69 2. 293	9. 7576 9. 8 219
	1 -0. 264280	0.041214	~6. 898	0. 0001
	1 -0.132837 1 -0.814494	0.02082B	-6. 374	0. 0001
	-0.079253	0.074210 0.072 30 7	-10. 976 -1. 0 96	6. 90 01 6. 2731
SELFEST	-0.012087	0. 067597787	-1.591	0. 2731 0. 1117
	-0.034467	0. 151860	-0. 227	0.8204
	1 -2.008 92 60 1 1 0.009 976712	6. 6392692 71 6. 131397	-0. 969	0. 3325
ABSENT	0.013243	0. 131397 0. 96 4207273	9. 076 3. 148	0. 9395 0. 0 017
	-0. 172207	0. 183726	-0. 937	9.3487
	l -0. 90855699 l -0. 031012	0.015569	-9.559	9.5826
	C. 036769	0.072117 6.025470	-0,441 1,444	0.6592 9.1489
MDLANTRL 1		0.063001	-0. 95 7	0.3385



HS&B, SPECIFICATION 2, MONTHLY EARNINGS

DEP VAR	IAB	'.NMTHPAY			
		SUM (F MEAN		
SOURCE MODEL	Df 76			F VALUE	PROB) F
ERROR	4236	••••		12. 220	9. 999 1
C TOTAL		682.47			
	MSE			9.1682	
C. V.	MEAN			0. 1544	
0. 1.		5. 521 17	1		
		PARAMETE	R STANDARD	T FOR HOL	
VARIABLE	DF	ESTIMAT		PARAMETER=0	PROB > 'T'
INTERCER	, 1	6. BACCO			
CONC	i			121.241	0.0001
LINCON	1	-0.007071	0.017640	-0. 51 1 -0. 4 00	0.5097
CONEXP	1	-0. 0056553:	0.020619	-0. 274	9. 6832 9. 7839
ACAD	1	-0. 0376 0 4 -0. 01 8 939		-0 507	0.6120
SRVOC	i	0.043610		- 0. 794	0.4274
SRACAD	1	●. 02658 5		1.742 0 .615	0. 0816 0. 5386
CONTR LIMCONTR	1	0. 097288		3.266	0. 001 1
CONEXPTR	-	0. 11 0 237 0. 0 94247		3.773	0.0002
HISPM	ī	0.008475965		2. 387	0.0170
NATH	1	-0. 0731 3 9	0.046866	0.378 -1.561	0. 7056 0. 1187
BLM OM	1	-0. 00517663		-0. 202	0.8397
HISPF	i	~4. 044184 -0 . 0 84448		-0. 987	0.3238
.MTF	1	-0. 114057		-3. 1 08	0.0019
BLF	1	-0. 0 97648	0.029025	-1.918 -3.364	0.0552 0.0008
WHF OF	1	-0.124274		-7.484	9. 9001
HCAP	i	-6. 844723 -0. 030594		-0. 923	0.3563
ENG2LANG	1	9. 021805	0.017898 0.033886	-1.709 0.644	0.0874
MDENSLAN	1	-0. 001 59575	0.044832	-0. 036	0.5199 0.9716
SES MDSES	1	0.042751	0.00 9376879	4. 559	0.0001
FAST	i	-0.136854 0. 8 23407	0. 090 855	-1. 50 6	0.1321
SOUTH	1	2.011214	0. 017705 0. 015630	1.322 6. 717	9. 1862
WEST	1	9. 038373	9. 018582	2. 965	0. 4732 0. 0390
LMEXP MDLMEXP	1	6.06 1319391 -0.09 9766	●. 00 02323585	7.678	6.0001
TENURE		000 0544116	0. 956952 9. 999221594	-1.780	0. 075 2
MOTENURE	1	6.009562014	0.068043	~0. 246 0. 141	0.8060
TEST MDTEST	1	0.0004322978	0.000888652A	0. 486	0.8882 0.6267
ENROLL	1	9. 98 0891 ~0. 9 79624	0.049020	1.650	0.0990
POSTO	ī	0.002103084	0.017912 0 .018232	-4.445	0.0001
P09T1	1	0 . 032423	0.022638	0.115 1.432	0.9082
POST2 INDETER	1	-0.00472846	Ø. 65 0474	-0. 094	0. 1521 0. 9254
MDPOST	1	0.016802	0.018696	€. 899	0.3689
MORKCOMP	i	9. 012410 9. 012038	0. 0 43064 0.0 08696543	0. 288	0.7732
MDWKCOMP	1	9.117957	0.091987	1.384 1. 28 2	0.1664
EIGHT MDEIGHT	1 .	-0.000645105	0.013447	- 3. 048	0.1998 0.9617
BPA10	1	9.019512 0.015073	0.018696	1.044	Ø. 2967
MDGPA10	i	0.019641	0.00955853 0.02500 <i>0</i>	1.577	0.1149
HORKINHS	1	0. 033536	0.017786	9. 785 1. 885	9. 4323
SPOUSE KID	1	0. 844267	0. 0 19 0 57	2. 323	9. 0594 9. 8282
URBRURAL	i	-0.00511468 -0.014975	0. 023890 0. 011908	-0.214	9. 8305
PROFIECH	1	-0.010171	0. 033880	-1.258 -8.386	0. 2086 0. 7640
MGR BALES	1 1	0.116159	0.036079	3. 221	0.7640 0.0013
CLERK	i	-0.161498 -0.071980	0.027725	-5. 825	0. 0001
CRAFT	1	9. 004 1 82646	9. 823576 8. 823368	~3. 053	0. 0023
OPERATE	1	6.0 21985	9. 923633	0. 179 6. 922	0. 8579 0. 356 3
FARM FARMLAB	1 1	0.657169	7. 213144	3. 083	0. 3363 0. 0021
SERVICE	i	-0. 153741 -6. 176191	. 6 44315	-3. 469	0.0005
PHHBERV	1	-0. 768374	0. 022395 0. 079794	-7. 867 -9. 638	9. 9961
MDOCCUP SELFEST	1	-0. 141825	0. 077747	-1. 324	0. 0001 0. 06 82
MDSLFEST	1 1	-0.017800 -0.134511	0. 008169357	-2. 179	n. 6 294
LOCOFCON	_	- 0. 00 763949	0. 163286 0. 00998 2174	-0. 824	0.4101
MDLOCCON	1 (9. 06 3461683	8. 141284	-9. 771 6. 025	0.4405 8 9885
ADSENT MDADSENT	1	e. 013300	0. 99 4523827	2. 940	0. 9805 0. 0033
DISCIPPR		-0. 34571 <i>6</i> -0. 00 355852	0. 197549	-1.750	0.0862
MDDISPRB	i	9. 94L 156	0. 016740 0. 077544	-0.213	0.8317
LAHTRBLE MDLAHTRL	1	0.053918	e. 6 27386	6. 595 2. 188	0.5 517 0.6 287
······································	1	-0. 041281	2. 067827	-0.609	0. 5428

NLS, HOURLY EARNINGS

DEP VAR	ORIF.	LNHRPAY			
DEF VAIL	HOLL :	SUM OF	MEAN		
SCURCE	DF	SQUARES		E HOLLE	2002: 5
MODEL	44	215.975		F VALUE 35.456	PROB>F
ERROR	4208	582. 552		33. 436	0.0001
C TOTAL		798. 528			
	MSE	0.372074		. 0. 2705	
DEP	MEAN	1.665198		0.2628	
c. v.		22. 34415			
		PARAMETER	STANDARD	T FOR HO:	
VARIABLE	DF	ESTIMATE		PARAMETER=0	PROB > !T!
			•		
INTERCEP	1	1.088078	0.069467	15. 663	9. 2001
SES	1	0.00 2512454	0.0008247441	3. 046	0.0023
NEAST	1	0. 075194	0.018181	4. 136	0.0001
900TH	í	0. 03 8447	0.015951	2. 410	0.0160
WEST	1	0. 1 <i>0</i> 9541	0.018585	5. 894	0.0001
RURAL	1	-0. 071987	0 . 0 17654	-4. 078	0.0001
MDRURAL	1	-0. 023 90 5	0.053867	-0. 444	0.6572
ENG	1	0. 017732	Ø. 028880	0. 614	0.5392
HISM	1	0. Ø22545	0.027002	0. 835	0.4038
BLM	1	-0.00227545	0.024027	-0.095	₹. 9246
NATM	1	0.015229	0.044130	0. 345	0.7300
OM	1	-0. 016246	0.0 27291	-9. 595	0.5517
HISF	1	-0. 1 14299	0. 025778	-4. 434	0.0001
BLF	1	-0. 128793	€ 923473	-5. 487	0.0001
NATF ·	1	-0.136419	0.038974	-3. 500	0.0005
WHF	1	-0. 185568	0.016376	-11.331	0.0001
OTHE	1	-0.179102	9.028677	-6.246	0.0001
AFQT	1	0. 963124249	0.0024459542	7. 006	8.000i
MDAFQT	1	0. 044058	0.0 31868	1.383	0.1669
GPA 10	1	-0.00507984	0.009714701	-0. 5 23	0.6011
MDGPA10	4	-0.00713094	9.018142	-0.393	0.6943
CONTR	1	0.0 67099	0.030429	2. 205	0.0275
CONC	1	-0.017269	0.025143	-0.687	0.4922
LIMCONTR	1	0.030945	0.029417	1.052	0. 2929
LIMCON	1	-0.013301	0.020383	-0.662	0.5478
CONEXPTR	1	-0.019393	0.041508	-0.467	0.6404
CONEXP	1	0.002862867	0.025427	0.113	0.9104
ACAD	1	-0.00723529	0.020918	-0.346	0.7294
SRVOC	1	0. 039204	0.029945	1.309	0.1905
SRACAD	1	0. 038433	0.023924	1.606	0.1083
LMEXP	1	0.001232794	. 00007138679	17.269	0.0001
TENURE	1	0.013776	0.001386253	9. 938	0.0001
HOURS	1	·0. 00 4565 5 2	0.0008866352	-5. 149	0.0001
SESTEEM	1	9 . 100 6329591	0.001557516	4. 064	0.0001
MDESTEEM	1	0. 033889	0.036 617	0. 926	0.3548
NEPOSTØ	1	0. 0 37230	0.021715	1.715	0.0865
NEPOST1	1	0 029981	0.020934	1.432	Ø. 1522
NEPOST2	1	0. 05 57 0 1	0.0 23611	2. 359	0.0184
NEPOST3	1	0. 09 2494	0.041889	2.208	0.0273
NEPOST4M	•	0. 180858	0. 0 21591	8. 377	6. 9001
POST0	1	-0.029923	0. 029 91 4	-1.003	0.3172
POST1	1	-0. 244587	0.0325 33	-1.371	0.1706
POST2	1	-0.050294	0.0359 21	-1.400	0.1615
POST3	1	-0.037516	0.048924	-0.917	0.3593
POSTGTE4	1	0. 2 0 4914	0.045586	4. 495	0.0001

BEST COPY AVAILUDED



NLS, MONTHLY EARNINGS

DEP VA	RIABLE	LNMTHPAY			
		SUM D	E 45511		
SOURCE	DF	SOUHRE		_	
MODEL	43	247.85		F VALUE	PROB) F
ERROR	4209	630. 48		38.480	0. 00 01
C TOTAL	4252	878. 33			
	OT MEE	0. 38703	_		
DEF	MEAN	6. 84620	· · · · · · · · · · · · · · · · · · ·	0. 2522	
C. '.		5. 653235		0.2749	
		J. 603E3	,		
		PARAMETER			
VARIABL	E DF	ESTIMATE		T FOR HØ:	
		COLIMAIC	ERROR	PARAMETER-0	PROB > !T!
INTERCE	P 1	6. 081 460			
SES	1	9. 902747760	0.061250	99. 289	0.0001
NEAST	ī	2. 059843	0.0008578071	3. 203	0.0014
SOUTH	ī	0.042140	4.470070	3. 167	0.0016
WEST	1	0. 109691	4 10031	2.540	0.0111
RURAL	ī	-0.062197	0.019332	5.674	0.0001
MDRURAL	ī	-0.027001		-3. <i>3</i> 89	0.0007
ENG	i		0.05 6032	-0.482	0. 6299
HISM	i	0. 010728	0. 930037	0.357	Ø. 7210
BLM	ī	0.015478	0.0 28 0 83	0.551	0. 5816
NATM	i	-0.024840	0.02496 4	-0. 995	0. 3198
OM	i	0.028627	0. 845898	0.624	0. 5329
HISF	i	-0.00988191	0.0 28384	-0.348	9. 7277
BLF		-0. 161229	0.0266 9 0	-6.041	0.0001
NATE	1	-0.180534	0.0 24254	-7.443	
WHF	1	-0.185617	0.040471	-4. 586	0.0001
OTHE	1 1	-0.230669	0.0 16861	-13.680	0.0061 0.0001
AFQT	1	-0.217161	0.0 29/59	-7. 297	6.000 1
MDAFOT	1	e. 663681936	0.0004638701	6. 644	0. 0001
GPA16	î	0.044650	0.033149	1.348	
MDGPA10	1	-0.00828108	0.010104	~0. 820	0.1777 0.4125
CONTR	1	-0.00819558	0.018872	-0. 434	0.4125 0.6641
CONC	1	0.073740	0.031651	2. 330	
LIMCONTR	1	-0.023351	0.02615 2	-6. 893	0.0199
LIMCON	i	0.019657	0.0305 92	9. 643	0.3720 0.5205
CONEXPTR	1	-0.017389	0.021202	-6. 820	
CONEXP		-0.030484	0.043173	-0. 706	0.4122
ACAD	1	00008819872	0. 026448	0.003	0.4802 0.0073
SRVOC	1	-0.018045	0.021751	-0. 830	0. 9973
SRACAD	1	0.035245	0.0 31148	1.132	0.4668 9.0578
LMEXP		0.629730	0.024882	1. 195	Ø. 2579
TENURE	1	0.001289424 .	00007419872	17. 378	0. 2322
SESTEEM		0.012767	0.001440645	8. 876	0.0001
MDFSTEEM	1	0.007441854	0.001618812	4. 397	0.0001
NEPOSTO	1	0.022412	Ø. 038084	0.588	0.0001
NEPOST1		0.032736	0. 0 22585	1.449	0. 5562
NEPOST2	1	9. 932594	0.0 21775	1. 493	0.1473 0.1356
EPOST3		0.061151	0. 0 24559	2.490	0.1356
NEPOSTAM	1	9. 985786	0.043570	1. 969	0.0128
FOST 0	1	0.195616	0.022447	8. 715	0.049£ 0.0001
POST1	1	-0.047346	0.0311 04	-1.582	0. 1280 _
	1	-0.063214	0.033825	-1.869	0.9617
POST2	1	-0.060151	0.037361	-1.610	0.1075
POST3	1	-0.049861	0.042567	-1. 171	0.2415
POSTGTE4	1	0. 233239	9. 047.379	4. 923	9.0001
			- · -		A. 696 I

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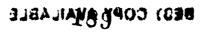


HS&B, SPECIFICATION 1, HOURLY EARNINGS

DEP VARIABLE	1 NURCOV			
DEP VARIABLE	SUM OF	MEAN		
SOURCE DF	SQUARES	SQUARE	F VALUE	PROB) F
MODEL 71 ERROR 6312	94. 482497 818. 958	1.338739 0.129746	19, 256	0. 000 1
ERROR 6312 C TOTAL 6383	9,3,448	U. 123770		
ROOT MSE	€. 368283	R-BOUARE	6. 1034	
DEP MEPN	1.45 0 499 24.83304	ADJ R-80	0.0934	
C. V.	PARAMETER	STANDARD	T FOR HO:	
VARIABLE DE		ERROR	PARAMETER=0	PROB > 'T!
			-	
INTERCEP 1		0.043352 0.016755	34. 078 6. 487	0.0001 0.6261
LIMCON 1		0.014120	6. 171	0.8643
CONEXP 1		0.016498	-0. 263	0.7928
MDTRANS 1		0.060227 0.017453	-6. 320 -6. 769	0. 7491 0. 4786
SRVOC 1		8. 6 2 9 411	1, 757	0. 0789
SRACAD 1	0.027784	£. 032765	0.846	0.3978
CONTR 1		0.026182	3. 765 3. 374	0.0002 0.0007
LIMCONTR 1 CONEXPTR 1		8. 925195 9. 934972	2. 567	0. 0103
HISPM 1	0.034455	0.019258	1.789	0.0736
NATM 1		0.04239 6 0.021335	-1.183 1.373	0. 2368 0. 1698
OH 1		0. 03524	-0. 33 4	0.7387
HISPF 1	-0.044238	0.021477	-2.060	0. 0395
NATF 1		0.0464 0 5 0.022219	-2, 251 -1, 0 80	f. 6 244 6. 2861
WHF 1		6. 01321°	-6. 391	0.0001
OF 1		9.033869	-0. 240	0.8101
HCAP 1		0. 014742 0. 155269	-1.438 -0.150	0.150 6 0.8 811
MDHCAP 1 ENG2LANG 1		0. 027615	0. 993	0.3209
MDENSLAN 1	0.018659	0.036518	0.511	0.6094
SES 1		0.007417601 0.078071	6. 598 -2. 683	0. 60 01 0. ₽ 073
MDSES 1		0. 6/66/1 0. 614337	1. 395	0. 1631
SOUTH 1		0.012768	0. 928	0. 3534
WEST 1		0.015106 0.0001912524	4. 422 5. 336	0.0001 0.0001
MDLMEXP 1		0.042670	-1.735	0.08 28
TENURE 1			0.921	0. 3572
MDTENURE 1		0.05 3220 0.000 7319297	6.315 9.677	0.7528 0.4982
MDTEST 1		0.039783	e. 509	0.6111
ENROLL 1		0.014066	-2.260	0. e^~8
POST0 1		0.015779 0.017960	1.731 1.033	0.1 6 0. 15
FOSTE 1	-0. 020258	0.034661	-0.584	0. 5589
INDETER 1		0.015846	2.013	ð. 0442
MDPOST 1		0.034478 0.006986636	1.344 1.379	0.1789 0.1680
MDHKCOMP 1	0.015170	0.079966	0.190	Ø. 3495
ENJOY 1		0.009865039	1.833	0.0669
MDENJOY 1		0. 043255 0. 017631	0.597 1.619	0.3568 0.3684
MDIMPORT 1		0. 040536	0. 231	0.8173
PLAN 1 MDPLAN 1		0.009647591	1.261	Ø. 2072
EIGHT 1		0.066602 0.011029	-2. 077 0. 397	0.0379 0.6 911
MDEIGHT 1	0.037452	0.015644	2. 394	0.0167
GPA10 1 MDGPA10 1		0. 00766 ² 356 0. 020289	-1 266 0.494	0.2055 0.6212
WORKINHS 1		0.013854	1.265	6. 2058
SPOUSE 1	2 2 2	0.016694	٤. 819	0.0048
KID 1 URBRURAL 1		0.020885 0.0095998 0 9	9. 0 91 -3. 836	0.9272 6.0001
PROFTECH 1	-0.01394£	0.626861	-0. 519	0.6036
MGR 1		0.031950	1.106	0. 2687
SALES 1 CLERK 1		0,921438 0,019065	-5. 848 -2. 749	0.0001 0.0060
CRAFT 1	-0. 967667	0.020718	-3. 266	0.0011
OPERATE 1		0.020703	0.496	6. 6201
FARM 1 FARMLAB 1		6. 181425 9. 6 39650	1.563 -6.028	0.1181 0.0001
SERVICE 1	-0. 128621	6.018244	-7.950	e. 0 001
PHHSERV 1 MDDCCUP 1		0.057985	-10.200	0.0001
MDOCCUP 1 SELFEST 1		0.063969 0.006597962	-1.842 -1.438	0.0656 0.1504
MDSLFEST 1	0.022209	0.144921	0. 153	0.8782
LOCOFCON 1 MDLOCCON 1		0.006146764	-0. 199 0. 0 50	0. 8423 0. %01
		0.130428	₩. ₩JW	0. 9601

HS&B, STECIFICATION 1, MONTHLY EARNINGS

DEP VARIA	BLE:	LNMTHPAY			
2011225	-	SUM OF	MEAN		
SOURCE MODEL	DF 71	SQUARES 583, 287	SQUARE	F VALUE	PROB) F
	312	1932, 176	8.215312 9. 306111	26. 838	0.0001
C TOTAL 6		2515. 463	0.500111		
ROOT		0.553273	R-SQUARE	0.2319	
DEP M	EAN	6. 331776	ADJ R-SQ	0. 2232	
C. V.		8. 738Ø45	STANDARD	T 500 NA.	
VARIABLE	DF	PARAMETER ESTIMATE	ERROR	T FOR HO: PARAMETER=0	PROB > 'T'
***************************************	•				-1154
INTERCEP	1	6. 679 58 2	0.066589	100.311	0.0001
CONC	1	e. 95 7981	0.025736	2. 253	0.0243
LIMCON	1	0.001158849 0.023464	0.021688 0.025341	0. 053 0. 926	0.9574 0.3545
MDTRANS	1	0. 010489	8. 092510	Ø. 113	0. 9097
ACAD	i	-0.045160	0. 026808	-1.685	0.0921
BRVDC:	1	0.032232	0.03135 1	1.028	0.3039
BRACAD	1	0.018265	0.050328	0. 363	0.7167
CONTR LIMCONTR	1	6.098 028 6. 1 0 1231	0.040215 0.038700	2. 438 2. 616	0.0148 0.0089
CONEXPTR	i	0.107808	0.053718	2.007	0.0448
HISPM	1	0.006792021	0.029580	0. 230	0.8184
NATH	1	-0.075463	0.065121	-1.159	0.2466
BLM	1	-0. 039306	0.032771	-1.199	0.2304 0.2434
OM HISPF	1	-0.063163 -0.138941	0.054139 0.032988	-1.167 -4.212	0.0001
NATE	i	-0. 186031	0.071278	-2.610	0.0091
BLF	1	-0.186181	0.034127	-5. 456	0. 0001
WHF	1	-0.190155	0.020291	-9. 371	0.0001
OF	1	-0.160633	0.0520 23	-3. 088	0.0020
HCAP MDHCAP	1	-0.026799 -0.213328	6. 022644 9. 238494	-1.184 -0.894	0.2367 0.3711
ENGELANG	i	0.934643	0.042416	0.817	0.4141
MDENSLAN	1	-0.041545	0.056092	-0.741	0.4589
SES	1	6. 681 665	0.011393	7. 110	0.0001
MDSES EAST	1	-0.151153	0. 119917 0. 022022	-1.260 -0. 667	0. 2075 0. 5045
BOUTH	i	-0.014699 -0.022045	8.019611	-1.124	0.2610
WEST	ī	0.042782	0.023204	1.844	0. 0653
LMEXP	1		0.0002937645	3. 583	0.0003
MDLMEXP	1	-0.176669	0.065541	-2.696	0.0070
TENURE MDTENURE	1	0.155582	0.0802806822 0.081747	0.249 1.903	0.8034 0.0571
TEST	i	-9.00145738	0.001124247	-1. 296	0. 1949
MDTEST	1	0.046663	Ø. C 106	0.764	0. 4451
ENROLL	1	-0.25 3713	0.021606	-11. 743	0.0001
POSTO POST1	1	0. 025695	0.024237 0.027586	1.060 -4.034	0.2891 0.0001
POST2	i	-0. 209799	0.053239	-3. 941	0.0001
INDETER	1	-9. 820714	0.024340	-0.851	0.3948
MDPOST	1	-0.031427	ø. ø52959	-0. 593	0.5529
HORKCOMP	1	9. 939534	0.010732	2. 845	0.0045
MDWKCOMP ENJOY	1	6. 0 76067	0.122828	0.619	0.5357 0.0084
MDENJOY	i	0.0 39929 0.00 3654574	0.015153 0.066440	2. 635 0. 0 55	0. 9561
IMPORT	ī	0.016075	0.027081	0. 594	0. 5528
MDIMPORT	1	0. 023969	0. 0 62263	0. 385	0.70∂3
PLAN	1	0.009788928	0.014819	0. 661	0.5089
MDPLAN EIGHT	1	0.038757 0.009142188	0.102301 0.16940	0. 379 0. 540	0. 704A 0. 5894
KDEIGHT	1	0.017845	0.024029	0. 743	0.4577
GPA10	1	-0.029743	0.011771	-2, 527	0.0115
MDGPA10	1	0. 030934	0.031165	0. 993	0.3210
WORKINHS	1	8. 0 78895	0.021279	3.708	0.0002
SPOUSE KID	1	0.089722 0.027874545	0.025642 0.032081	' 3. 499 0. 245	0.0005 0.8061
URBRURAL	1	-0.041788	0.014745	-2. 834	0.0046
PROFTECH	1	-0.115849	0. 041258	-2.808	0.0050
MGR	1	0. 169915	0.049076	3.462	0.0005
SALES CLERK	1	-9. 236697 -0. 138243	0. 0 32928 0. 0 29284	-7. 188 -4. 721	0. 0 001 0. 0001
CRAFT	i	0. 059306	0.031823	1.864	0.0624
OPERATE	1	0.066156	0.031799	2.080	0.0375
FARM		0. 388835	0.278670	1.395	0. 1639
FARMLAB	1	-0. 060697	0.060902	-0.997 -0.644	0.3190
SERVICE PHHSERV	1	-0. 242221 -0. 906950	0.828823 0.089066	-8.644 -10.183	0. 0 001 0. 0 001
MDOCCUP	i	-0. 135702	0.098257	-1. 381	0. 1673
SELFEST	1	-0.020349	0.010134	-2 . 0 08	0.0447
MDSLFEST	1	-0 . 229967	0. 222599	-1.033	0.3016
MDLOCCON	1	0.011016 -0.00296903	0.012514	0.880 -0.015	Ø. 3787 Ø. 9882
	•	10 703	144 a. Engana		U. 700E



HS&B, SPECIFICATION 2, HOURLY EARNINGS

DEP VARIA	BLE	LNHRPAY			
		SUM OF	MEAN		
SOURCE	DF	SQUARES	SQUARE	F VALUE	PROB) F
MODEL ERROR 6	71 312	95. 357614	1.343065	10. 363	0. 000 1
C TOTAL 6		818.083 913.440	6. 129608		
ROOT		8. 36 0 010	R-SQUARE	8. 1844	
DEP M	EAN	1.450499	ADJ R-SQ	0. 0943	
C. V.		24.81977			
		PARAMETER	STANDARD	T FOR HO:	
VARIABLE	DF	ESTIMATE	ERROR	PARAMETER=0	PROB > 'T'
INTERCEP	1	4 450707	0.044003	70 754	
CONC	i	1. 459783 0. 010221	0, 044293 0, 016754	32. 754 9. 61 0	0. 9001 0. 5410
LIMCON	i	0.003380868	0.014117	0.239	0. 6107
CONEXP	1	-0.00281869	0.016493	-0. 171	0.8643
MDTRANS	1	- 0. 01860 6	0.06830 2	-0. 309	8. 75 77
ACAD	1	-8.011738	8. 817441	-0. 673	0.5010
SRVOC	1	9. 03785 7	0. 6203 91	1.857	0.0634
SRACAD CONTR	i	0.02803 7 0.10303 3	6, 932758 6, 926158	0. 656 3. 940	0.3920 0.8001
LIMCONTR	i	e. 686835	8. 825214	3. 444	0.0001
CONEXPTR	1	0.093550	Ø. 63495 9	2.676	0.0075
HISPM	1	6.0 29166	0.019155	1.523	0. 1279
NATH	1	-6. 052567	0.042334	-1.242	8. 2144
BLM OM	1	9. 628944	0.021297	1.359	9. 1742
HISP:	i	-0.013560 -0.047301	9.63 5312 6.6 21403	- 8. 384 -2. 210	9. 7 9 10 9. 92 71
NATE	i	-0.116727	0.046312	-2. 520	8. 8117
BLF	ī	-0.024716	0.022175	-1.113	0. 2651
M IF	1	-0. 085 371	0.0 1 3 21 3	-6. 461	0.0001
OF	1	-0.013224	0. 033788	-0. 391	0.6955
HCAP MDHCAP	1	-0.021547	0.014747	-1.461	9, 1440 9, 7545
ENGSLANG	i	0.071746 0.024044	0.229533 0 0276 0 9	0. 313 0. 871	0. 7545 0. 3838
MDENSLAN	ī	0.027518	0.036640	9. 751	e. 4526
SES	1	0.048499	0.00740841	6. 547	6.0001
MDSES	1	-0. 206749	0.0 78327	-2.640	0.0083
EAST SOUTH	1	0.019518	0.014333	1.362	0.1733
MEST	1	0.013949 0.062334	0.012747 0.015166	1. 0 94 4.110	0, 2739 9, 800 1
LMEXP	ī		0.0001912073	5. 423	0. 0001
MDLMEXP	1	-0. 073850	0.042626	-1.732	0.0832
TE: URE	1	0.0001645858		0. 901	0. 3677
MDTENURE TEST		0. 013861	0.053169	6. 261	0. 7943
MDTEST	1	0.018518	8.0007308523 9.040101	-0. 764 0. 462	0. 4451 0. 6₹43
ENROLL	i	-0. 030651	0.014062	-2.180	0.0293
POSTO	1	0.025523	0. 015754	1.620	0.1953
POST1	1	0. 01928 0	0.0 17953	1.074	0. 2829
POST2 INDETER	1	-0.020211	0. 034630	-0. 584	0.5595
MDPOST	i	0.032123 8.044158	0.015830 0.0526	2 . 6 29 1. 283	8. 6425 8. 1997
WORKCOMP	1	0.011032	0.006996759	1.577	8. 1149
MDWKCOMP	1	-0.012250	0. 077940	-0. 157	0. 8751
ZIGHT	1	0.001205521	0.010984	0. 110	0.9126
MDEIGHT	1	6. 934953	0.015565	2, 254	6. 0242
GPA10 MDGPA10	1	-0.00580526	0.007728911	-0. 751	0.4526
WORKINHS	i	0.008833354 0.019049	0. 620 283 0. 0 13810	0. 436 1. 379	0. 6632 0. 1678
SPOUSE	1	0.045281	0. 916685	2. 714	8. 69 67
KID	1	-0.000948857	0.020888	-0. 945	0.9638
URBRURAL	1	-0. 033894	0.009595944	-3. 532	0. 0 664
PROFTECH MGR	1	-0.014616	0.026549	-0.544	0. 5868
SALES	1	0, 032947 -0, 124229	0. 031 936 0. 021 436	1. 0 32 -5.795	0. 36 23 0. 66 01
CLERK	i	-0. 052725	0.019061	-2. 766	0. 60 57
CRAFT	1	-0.069951	6.020690	-3, 381	0. 6967
OPERATE	1	6.010071	0.020684	0.487	0. 6263
FARM FARMLAB	1	0.264042	0. 11256	1.456	0.1153
SERVICE	i	-0. 235282 -0. 129507	0. 4,9556 0. 618235	~5. 948 -7. 182	8, 6661 8, 6661
PHI-SERV	ī	-6. 587394	0.0 57958	-10. 135	0. 0001
MDOCCUP	1	-0. 117893	0. 0639 85	-1. AR	0. 065 %
SELFEST	1	-0.00918722	0.00668264	-1. 391	6. 1641
MDSLFEST LDCOFCON	1	0. 012701 -0. 00 299892	0.149221 0.00131660	0.0 85	6. 9322 8. 7123
MDLOCCON	1	0. 013426	6.008 131668 0. 132635	-0. 369 0. 101	6. 7123 6. 9194
ABSENT	i	0. 015091	0. 132633	4. 048	8. 2001
MDABSENT	1	-0.126676	0. 23 960 7	-0. 529	0.5970
DISCIPPR	1	0.002682331	6.014135	0. 1 3 0	0. 8495
MDD I SPRB LAWTRBLE	1	-0. 00341963 0. 013552	0.062 8'1 0.0243 11	-9, 854 8, 564	0. 9566 0. 5725
MELANTEL	i	-0. 059365	0. 058443	-1.016	6. 3 9 96

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190° \ 190° \ 180°

HS&B, SPECIFICATION 2, MONTHLY EARNINGS

DEP VAR	I ABLE	LINMTHPAY			
		SUM (
SOURCE MODEL	DF 71			F VALUE	PROB) F
ERROR	6312			27. 9 32	0. 000 1
C TOTAL					
	T MSE			0. 2332	
DEP C. V.	MEAN			8. 2245	
U. V.	'	8. 73871 PARAMETE	_	_	
VARIABLE	DF	ESTIMAT	- Children	T FOR HO!	
			- ERNUR	PARAMETER-0	PROB > 'T'
INTERCEP	-	6.64330		97. 676	9.0001
LIMCON	1	9. 65986 8. 66260255		2. 325	9. 0201
CONEXP	î	9. 92562°		0. 12 0	0. 9044
MDTRANS	1	0. 02049		1.912 8.221	0.3116
ACAD SRVOC	1	-0. 04350	9 0. 926782	-1.625	9. 8248 9. 1943
SRACAD	1	8. 834 1 13 8. 8 1922		1.090	8. 2760
CONTR	i	8 . 1 6 223;		9.382	0. 7922
LIMCONTR	_	8. 0 9999;		2. 546 2. 583	8. 8189 8. 8888
CONEXPTR	_	9. 109223	9. 953680	2.035	8. 00 98 8. 0 419
HISPM NATM	1	-0.000742156 -0.084664		-0. 925	0. 9799
BLM	i	-0. 00-00- -0. 042173		-1.362	6. 1928
OM		-0. 072361		-1.290 -1.335	0. 1972
HISPF	1	- 0. 144601	0. 0 32864	-4. 4 8 0	8. 1821 9. 60 01
NATF BLF	1	-0. 199097		-2.800	6. 605 1
WHF	1	-0.186740 -0.189992	4. 00 .00.	-5. 484	0. 0001
OF	ī	-0. 168539		-9. 364	0.0001
HCAP	1	-0. 029955	4.4010.4	-3. 249 -1. 323	0.00 12 0.185 9
MDHCAF	1	-0. 583224	0. 352456	-1.655	0.0980
ENG2LANG MDEN2LAN	1	0. 0300 92	O. O-150.	0.710	8. 4778
SES	i	-0.041692 3.082225		-0.741	0. 4587
MDSES	1	-0. 172015		7. 228 -1. 4 30	8. 000 1
EAST	1	-0.013465	9. 922998	-0.613	9. 1527 9. 5491
SOUTH HEST	1	-0.017320		-0. 865	0. 3762
LMEXP	1	8. 039234 8. 001102370	0. 9 23287 0. 9002936959	1.685	8. 8921
MDLMEXP	1	-0. 172488	8. 865454	3. 755 -3. 63 5	0.0002
TENURE	1		0.0002805299	-2.635 8 .191	0 . 008 4 0. 8486
MDTENURE TEST	1	0. 144832	D. 081643	1. 774	8. 9761
MDTEST	1	-0.00154293 0.036379	0.001122251	-1.374	0. 1695
ENROLL	ī	-0. 251974	0.061577 0.021593	0.59 1	9. 5547
POSTO	1	8.0 22 0 68	0.024191	-11.669 6 .912	9. 000 1 9. 36 17
POST! POST2	1	-0.112398	0.027567	-4. 974	0. 9001
INDETER	1	-0. 209656 -0. 0205 ! 7	0.053175	-3. 943	0. 0001
MDPOST	ī	-0. 030760	0. 024307 0. ⊌52863	-0.844	9. 3987
WORKCOMP	1	0.033038	0.818744	-0. 582 3. 075	6. 5607
MDWKCOMP EIGHT	1	0.079964	0.119680	9.66s	0. 0021 0. 5041
MDEIGHT	1 1	0.004719286 0.012915	0.016866	0. 280	0.7796
GPA10	i	-0.025311	0. 023808 0. 011868	0. 542	0. 5875
MDGPA10	1	0. 028972	P. 031145	-2. 133 8. 930	0.03 30
WORKINHS SPOUSE	1	0.080820	0.021206	3. a ⁻	0. 352 3 0. 000 1
KID	1 (0. 088099 1 0021 70221	0.025620	3 439	9. 9996
URBRURAL	i '	8. 00 213 0 221 - 0. 0 37921	0.032074 0.014735	0.066	0.9470
PROFTECH	1	-0.114083	0.041227	-2. 574 -2. 767	0.0101
MGR	1	0. 169366	0. 049038	3. 454	0. 9057 0. 0006
SALES CLERK	1	-0.233630	6.031 .15	-7. 098	0.0001
CRAFT	i	-0. 134594 0. 058614	0. 6 29269	-4. 599	3.00 01
OPERATE	1	0.067796	0. 031770 0. 031761	1.845	9. 065 1
FARM	1	0. 368726	0. 278386	2. 135 1. 325	9. 03 28 9. 1854
FARMLAB SERVICE	1	-0.951999	9. 868748	-C. 840	0.4011
PHHSERV	1	-0. 240285 -0. 894980	9.028001	-8. 5 81	6001
MDOCCUP	i	-0.1334 00	0. 888996 0. 898252	~10.056	0.0001
SELFEST	1	-0. 829392	0.010139	-1.358 -2.011	9. 1746 9. 0447
MDSLFEST LOCOFCON	1	-0.354974	0.229134	-1.549	0.0443 0.1214
MDLOCCON	1 0	. 009378172 0. 056207	9. 0 12486	9. 750	0.4530
ABSENT	i	A	9. 293666 9. 995724133	9. 276	9.7826
MDABSENT	1	9.536170	0.367926	3. 491 1. 457	0.0005
DISCIPPR MDDISPRB		0. 00680663	0.021704	-0.314	0.1451 0.7538
LAWTRBLE	1 0	. 002952453 0. 065840	0.096448	0. 0 31	0. 9756
MDLAWTRL	i	0. 107319	0. 0 36869 0. 0 89741	1.786	0.0742
			VOJ/41	1.196	0.2318



NLS, HOURLY EARNINGS

DEP VARI	ABLE	: LNHRPAY			
	· ·	SUM OF	MEAN		
SOURCE	DF	SQUARES	1,100,004	F VALUE	DD0D) F
MODEL	44	325. 324		51.731	PROB)F 0. 300 1
ERROR	6009	858.839		51.751	6. 3661
C TOTAL	6053	1184.163			
KOOT	MSE	0.378055		0.2747	
DEP	MEAN	1.588746		0. 2694	
c. v.		23. 7958		3, 22, 7	
		PARAMETER	0.711071110	T FOR HO:	
VARIABLE	DF	ESTIMATE	ERROR	PARAMETER=0	PROB > !T!
THITEDOED					
INTERCEP	_	0.817967	0.052123	15. 693	0.0001
SES	1		0.0007011807	3. 549	0.0004
NEAST SOUTH	1	0. 085578	0.015244	5.614	0.0001
WEST	1	0.053181	0.013413	3. 965	0. 000 1
RURAL	i	0. 120869 -0. 051330	0.015674	7. 711	8. 000 1
MDRURAL	i	-0.051230 0.0004359623	0.015115	-3. 389	0.000 7
ENG	i	0.007888764	0.047129	0.009	ø. 99 26
HISM	i	0. 018650	0.0 24926	0. 316	0.75 16
BLM	i	0.001924282	0.023470	0. 795	Ø. 4269
NATM	i	0. 019659	0.020757	9. 093	0. 926 1
DM	i	-0. 033494	0.040 213 0.0 23621	0. 489	0.6249
HISF	i	-0. 682754	0. 023521 0. 022140	-1.418	0.1563
BLF	i	-0.092187	0.019626	-3.738	0.0002
NATE	i	-0. 143484	0. 033845	-4.697	0.0001
WHF	ī	-0. 146755	0.013976	-4. 239 -10. 500	0.0001
OTHE	ī	-0. 131220	0. 0 23188	-10. 500	0.0001
AFQT	1		0.0003872637	-5. 65 9 7. 4 22	0.0001
MDAFQT	1	0. 036695	0.027905		0.0001
GPA10	i	-0.00683321	0.008306476	1.315 ~0.8 23	0. 1886
MDGPA10	1	0.00273313	0.015662	9. 175	0.4107
CONTR	1	0.081272	0.028525	2. 84 9	6. 8615
CONC	1	-0. 028299	0.021585	-1.311	0.0044 0.1899
LIMCONTR	1	0.052530	0.026605	1. 974	0. 0484
LIMCON	1	-0.010100	0.017205	-0. 587	0. 5572
CONEXPTR	1	0.002726082	0.038356	0. 071	0. 9433
CONEXP	1	0. 023353	0.021238	1. 100	0. 2715
ACAD	1	-0.00594135	0.017054	-0. 348	0.7276
SRVOC	1	0. 0 17741	0. 026094	0.680	0.4966
SRACAD	1	0. 022075	0. 0 20386	1.083	0.2789
LMEXP	1	0. 001255017	. 00006376414	19.682	0.0001
TENURE	1	0.013008	0.001163164	11.184	0.0001
HOURS	1		0. 000 4572 0 93	5. 462	0.0001
SESTEEM	1	0.005125346	0.00 1325845	3. 8 66	0.0001
MDESTEEM	1	3. 020957	0.031145	0.673	0.5011
NEPOSTO	1	0.043648	0.019 678	2 . 2 18	0. 8 266
NEPOST1 NEPOST2	1	0.0 32189	0.019257	1.672	0.0947
	1	0.046287	0.021335	2. 170	0.0301
NEPOSTAM	1	9.967674	0.037684	1.796	0. 0726
NEPOSTAM	1	9. 185965 -0. 054954	0.019527	9. 477	0.0001
POSTO	1	-0. 054954 -0. 07885	9. 929790 9. 933153	-2.643	0.0082
POST1 POST2	1	-0. 078855 -0. 087403	0.022152 # 034455	-3. 560	0.0004
POST3	1	-0.067403 -0.069012	9. 024455 9. 027105	-3. 5 74	0. 0004 0. 01 3
POSTGTE4	1	0. 136749	0.027185 0.035445	-2 . 539	0.0112
~U3 U E4	•	v. 130/77	マ・ せょうキャカ	3 . 8 58	0.0001

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NLS, MONTHLY EARNINGS

DEP VARI	ABLE	5 LNMTHPAY			
		SUM O	F MEAN		
SOURCE	DF		7		
MODEL	27			F VALUE	PROB) F
ERROR	568			11.600	0.0001
C TOTAL	595				
ROOT	MSE	0.353776		A	
DEP I	MEAN	6.841823		0. 3554	
C. V.		5. 170798		0.3248	
			-		
		PARAMETER	STANDARD	T FOR HØ:	
VARIABLE	DF	ESTIMATE		PARAMETER=0	
				PHANNIE : EK-0	PROB > !T!
INTERCEP	1	5.008449	0.156338	38.432	
SES	1	0.002172786		1.464	0.0001
NEAST -	1	-0.086121	0.065644	-1.312	0.1437
BOUTH	1	-0.059306	0.061493	-0.964	Ø. 1901
WEST	1	0.0007540133		0. 912	0. 3352
RURAL	1	0.006656822		0. 012 0. 120	0. 9901
ENG	1	0.026075	0.052423	0. 126 0. 497	0.9046
FEMALE	1	-0.166822	0.030224	-5. 52 0	0.6191
AFQT	1	0.005532176	0.00113088	-3. 320 4. 892	0.0001
MDAFQT	1	-0.026217	0.062906	-0.417	0.0001
GPA10	1	-0.028232	0.027984	-1.009	0. 6770
MDGPA10	1	-0.050400	0.043294	-1.164	0.3135
CONTR	1	0.045407	0.080451	-1. 164 Ø. 564	0.2449
LIMCONTR	1	0.027436	0.073279	0. 374	0. 5727
CONEXPTR	1	0.038587	0.101798	0.374 0.379	0. 7082
CONC	1	-0.065995	0.067627	-0.976	0.7048
LIMCON	1	-0.020719	0.052912	-0.392	0.3295
CONEXP	1	0.011999	0.064173	-0. 392 0. 187	0. 6955
ACAD	1	-0.132691	0.068400	-1.940	0.8517
SRVOC	1	0.079937	0.069910	1.143	0.0529
SRACAD	1	-0.00385589	0.058009	-0.066	0. 2533
LMEXP	1		0.0001745837		0.9470
TENURE	1	0.007766733	0.003349111	7. 461 2. 319	0.0001
SESTEEM	1	0.010754	0.004033926	2.666	0.0207
ENROLL	1	-0.141983	0.045993	-3. 0 87	0.0079
POSTØ1	1	0.066406	0.03597 1	-3.687 1.646	0.0021
POST23	1	0.093414	0.049618	1.883	0.0654
POST4M	1	0. 365177	0.067120	1. 853 5. 441	0.0603
		· ·	J. J	J. 441	0.0001



TABLE C.17

DEP VARIABLE: LNHRPAY HS&B, HOURLY EARNINGS

DEL ANK!	ADLE	• LNDKPAL			
SOURCE	DF	SUM DF SQUARES	ME AN Soua re	F VALUE	PROB>F
MODEL ERRCR C TCTAL	56 618 674	14.461665 63.173050 77.634714	0.258244	2.526	0.0001
RODT DEP C.V.		0.319721 1.506972 21.21614	R-SQUARE ADJ R-SQ	0.1863 0.1125	
VARIABLE	DF	PARAMETER ESTIMATE	STANDARD ERR OR	T FOR HO: PARAMETER=0	PROB > T
P P P P P P P P P P P P P P P P P P P	THE CANADA THE TANKS OF THE PROPERTY OF THE PR	1.5462473 0.044878 0.044878 0.044878 0.063875 0.017653 0.017653 0.017653 0.017653 0.01733240 0.02863361 0.02863361 0.02863361 0.02863361 0.02863361 0.02863361 0.02863361 0.02863361 0.02863361 0.02863361 0.02863361 0.02863361 0.02863361 0.02863361 0.02863361 0.02863361 0.02863361 0.02863361 0.0333887273 0.033387273 0.033387273 0.03338	0.117267 0.117267 0.1287613 0.1287613 0.1287697 0.129710193 0.12	883135431106799356213677223961170861995 61503087265316886012211	114647197285123680008081119681860499121135360930344417058609222153356433547245245089722260346093034441705860092222862862955035472452246089722246203208095334869600000000000000000000000000000000000



HS&B, MONTHLY EARNINGS

DEP VARIABLE: LNMTHP	AY	ND.	NM T	11	2	F	ч		1	AR.	- V/	EΡ	D
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DEP AND	ALLE	1 CHATHAT			
SOURCE	OF	SUM OF Souares	ME AN S CUA RE	F VALUE	PROB>F
MODEL ERRCR C TOTAL	56 618 674	17.852427 70.798435 88.650862	0.318793 0.114561	2.783	0.0001
ROD T DEP (C.V.	MSE MEAN	0.338468 6.662335 5.080321	R-SCUARE ADJ R-SQ	0.2014 0.1290	
VAR JABLE	OF	PARAMETER ESTIPATE	STANDARD FRR CR	T FOR HO: PARAMETER=0	PROB > T
INDESTRUCT OF SELECTION REPORTED TO SELECTION OF SELECTIO		6.6663419 6.66633419 6.66633419 7.066633419 7.066633419 7.066633418 7.066633418 7.066633418 7.066633418 7.0666335	0.175734 0.175034 0.150511 0.150784 0.1578038 0.16771212 0.167712 0.167712 0.167712 0.167712 0.167712 0.167712 0.167712 0.167	560-718667338133345785718218577358129571381295713812957138129571381295713812957138129571381295713812957131120000000000000000000000000000000000	15408 075408 0759851075106866756280160074045152878209 84 8336428788308326 09533989023658675247650622215287883902788991 096000000000000000000000000000000000

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NLS, HOURLY EARNINGS

DEP VARI	ABLE :	LNHRPAY			
		SUM OF	= MEAN		
SOURCE	DF	SQUARES		F VALUE	D00D\ E
MODEL	28	36.371313		10.952	PROB)F
ERROR	567	57.248624		10. 332	0.0001
C TOTAL	595	103.620			
ROOT		0.344390		0.3510	
DEP I	MEAN	1.669969		0.3190	
C. V.		20.62252		0.3190	-•
• •			•		
		PARAMETER	STANDARD	T FOR HØ:	
VARIABLE	DF	ESTIMATE	- · · · · · · · · · · · · · · · · · · ·	PARAMETER=0	PROB > !T!
			EAROR	FARHUE I EK-Ø	PROB > !T!
INTERCEP	1	1.137219	0.186946	6. 083	Ø. 0001
SES	1	0.002120965		1. 468	0.1426
NEAST	1	-0.073831	0.063913	-1.155	0. 2485
SOUTH	1	-9.072341	0. بن 9931	-1.207	
WEST	1	-0.010281	0.058902	-0. 175	0.2279 0.8615
RURAL	1	-0.025164		-0. 173 -0. 463	
ENG	1	0.017170	0.05105 2	0. 336	0.6438
FEMALE	1	-0.132790	0.030052	-4. 419	0. 7368
AFQT	1	0.00533384	€. 001101471	4.842	0.0001
MDAFQT	1	-0.043179	0.061310	-0. 704	0.0001 0.4815
GPA10	1	-0.024302	0.027251	-0.892	0. 4815 0. 3729
MDGPA10	1	-0.044670	0.042153	-1.060	
CONTR	1	0. 033402	0.078349	0. 426	0.2897
LIMCONTR	1	0.043012	0.071392	0. 602	0.67@^
CONEXPTR	1	0. Ø38767	0.099097	0. 391	0. 547
CONC	1	-0.056333	0.065862	-0. 855	0.6958
LIMCON	1	0.001812072	0.051609	0. 635	0. 3927
CONEXP	1	0.015708	0.062475	0. 251	0.9720
ACAD	1	-0.141664	0.066623	-2. 126	0. 8016 0. 0330
SRVOC	1	0.081831	0.068058	1. 202	0. 0339
SRACAD	1	0.010234	0.056524	0. 181	0.2297
LMEXP	1	0.001309695		7. 706	0. 8564
TENURE	1	0.008966479	0.00326658	2. 745	0.0001
HOURS		-0.00678162	0.002761008	-2. 456	0.00 62
SESTEEM		0.009444815	0.003933286	2. 40 1	0.0143
ENROLL	1	-0.135229	0.044782	-3. 0 20	0.0167 0.0026
POSTØ1	1	0.064249	0.035017	1.835	
POST23	1	0.087204	0.048308	1.805	0.0671 0.0716
POST4M	1	0.363804	0.065341	5. 568	0.0716 0.0001
		· ·		A. 200	0. 000 I



NLS, MONTHLY FARNINGS

DEP VARI	ABLE	: LNMTHPAY			
SOURCE	20	SLIM OF			
MODEL	DF	SQUARES		F VALUE	PROB) F
	27	39. 200631		11.600	0.0001
ERROR	568	71.089603			
C TOTAL	595	110.290			
ROOT		0.353776		0.3554	
DEP I	TEAN	6.841823		0. 3248	
C.V.		5. 170792			
_		PARAMETER	STANDARD	T FOR HØ:	
VARIABLE	DF	ESTIMATE	ERROR	PARAMETER=0	. PROB > !T!
					11.00
INTERCEP	1	6.008449	0.156338	38.432	0.0001
SES	1	0. 002172786	0.001484068	1.464	0.1437
NEAST	1	-0.086121	0.065644	-1.312	0. 1901
SOUTH	1	-0.059306	0.061493	-0.964	0. 3352
WEST	1	0.0007540133	0.060449	0.012	0.9901
RURAL	1	0.006656822	0.055 524	Ø. 120	0.9046
ENG	1	0. 026075	0.05 2423	0.497	0.6191
FEMALE	1	-0.166822	0.030224	-5. 520	0.0001
AFQT	1	0. 005532176	0.00113088	4.892	0.0001
MDAFQT	1	-0.026217	0. 062906	-0.417	0.6770
GPA10	1	-0. 028232	0.027984	-1.009	0.3135
MDGPA10	1	-0.050400	0.043294	-1.164	0.2449
CONTR	1	0.045407	0.080451	0.564	0. 5727
LIMCONTR	1	0. 0 27436	0.073279	0.374	0.7082
CONEXPTR	1	0. 038587	0.101798	0.379	0.7048
CONC	1	-0.065995	0.067627	-0.976	0.3295
LIMCON	1	-0.020719	0.052912	-0.392	0. 6955
CONEXP	1	0.011999	0.064173	0.187	0. 8517
ACAD	1	-0.132691	0.068400	-1.940	0.0529
SI 70C	1	0.079937	0.069910	1.143	0. 2533
SRACAD	1	-0.00385589	0.058009	-0.066	0. 9470
LMEXP	1	0.001302525	0.0001745837	7. 461	0.0001
TENURE	1	0.00776673 3	0.003349111	2.319	0.0207
SESTEEM	1	2. 010754	0.004033926	2,666	0.0079
ENROLL	1	-0.141983	0.045993	-3.087	0.0073
POSTØ1	1	0.066406	0.035971	1.846	0.0654
POST23	1	0.093414	0.049618	1.883	0.0603
POST4M	1	0. 365177	0.067120	5. 441	0.0001
					



DEP VARIABLE: LNHRPAY HS&B, HOURLY EARNINGS

		,		
SOURCE DF	SUP DF SQUARES	FE AN S Cuare	F VALUE	PRDB>F
MODEL 57 ERRCR 90C C TCTAL 957	17.923026 111.409 129.332	0.314439 0.123788	2.540	0.0001
ROOT MSE DEP MEAN C.V.	0.351835 1.490597 23.60363	R-SQUARE ADJ R-SQ	0.1386 0.0840	
VARIABLE DF	PARAMETER ESTIMATE	STANDARD ERR CR	T FOR HO: PARAMETER=0	PROB > 11
INTERCEP INTERC	1.6352403 0.0133668 0.0777698 0.0132076 0.0132076 0.0132076 0.0132076 0.0132076 0.013264403 0.02297760 0.02297760 0.02297767 0.02297767 0.02297767 0.03365923 0.00537777788 0.037777788 0.037777788 0.03777788 0.037777788 0.03777788 0.03777788 0.03777788 0.03777788 0.03777788 0.03777788 0.03777788 0.03777788 0.03777788 0.03777788 0.03777788 0.0377888 0.0377888 0.0377888 0.0377888 0.0377888 0.0377888 0.0377888 0.0377888 0.0377888 0.0377888 0.0377888 0.0377888 0.0377888 0.0377888 0.0377888 0.0377888 0.0377888	0.105787 0.105786 0.105786 0.105789 0.105789 0.10585877 0.10585877 0.10585877 0.10585877 0.10585877 0.10587878 0.1058787 0.105878 0.1058787 0.1058787 0.1058787 0.1058787 0.1058787 0.105878787 0.10587878 0.10587878 0.10587878 0.10587878 0.10587878 0.10587878 0.10587878 0.10587878 0.10587878 0.10587878 0.10587878 0.10587878 0.10587878 0.105878 0.105878 0.105878 0.105878 0.105878 0.105878 0.10587878 0.10587878 0.10587878	\$264313510213343762141670360025356330395 1228831799095127620 \$264313510213343762141670360025356330395 12288831799095127620 \$2655983179909512763001420775788831799095127620 \$26559831799095127620 \$26559831799095127620 \$26559831799095127620 \$26559831799095127620 \$26559831799095127620 \$26559831799095127620 \$26559831799095127620 \$26559831799095127620 \$26559831799095127620 \$26559831799095127620 \$26559831799095127620 \$26559831799095127620	16284533594111089933672672043172650841568 219988858116146218971267789972477899772477899772757574771852 0.970167789977275757478881147747166900000000000000000000000000000000000

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DEP VARIABLE: LNMTHPAMS&B, MONTHLY EARNINGS

SOURCE	DF	SUPLECE SQUARES	SQUARE	F VALUE	PRD8>F
MODEL ERRCR C TCTAL	57 900 957	73.468051 239.209 312.677	1.288913	4.849	0.0001
RODT DEP 1 C.V.	MEAR	0.515546 6.400666 8.054567	R-SCUARE ADJ R-SO	0.2350 0.1865	
VAR JABLE	DF	PARAMETER ESTIMATE	STANDARD ERROR	T FOR HO: PARAMETER=0	PROB > T
TREET TAN PER POLICIAN TO SEL HE TONGER ON THE PROPERTY OF THE		6.614759 6.61775177 6.61775177 6.61775177 6.61775177 6.61775165177 6.617799 6.617199165 6.617199165 6.6171997 6.61719957 6.6171	0.153536 0.0503756 0.0503756 0.0503756 0.0503756 0.0503756 0.050376 0.10	676446701522926574822780936985694545867285576235659336867011002020202020202020202020202020202020	10038455178187689628474518183439738389990581646170355773305010038455324164876896287556818343973883899058641703557733050100000000000000000000000000



NLS, HOURLY EARNINGS

DEP VARIABLE:	LNUPDOV			
DEP ANITABLE:	SUM OF	MEAN	•	
SOURCE DF	SQUARES	SQUARE	F VALUE	PROB) F
MODEL 28	50. 336969	1.797749	14.679	0.0001
ERROR 799	97.851662	0.122468	14.073	0.0001
C TOTAL 827	148. 189	U. 122700		
ROOT MSE	0.3499 5 4	R-SQL'ARE	0.3397	
DEP MEAN	1.597403	ADJ R-8Q	0. 3165	
C. V.	21.90767	א נעא	0.0100	
C. V.	21. 30767			
	PARAMETER	STANDARD	T FOR HO:	
VARIABLE DF	EST IMATE	ERROR	PARAMETER=0	PROB > !T!
INTERCEP 1	0. 751001	0. 133187	5. 639	0.0001
SES 1	0.001608358	0.0 01258243	1.278	0.2015
NEAŞT 1	0. 025818	0. 05 4672	0. 472	0. 6369
SOUTH 1	0.005034369	0. 051058	0.0 99	0. 9215
WEST 1	0.060245	0.0 49638	1.214	0. 2252
RURAL 1	-0.041599	0.046613	- 0. 892	0. 3724
ENG 1	0.014886	0. 0 43871	0. 339	0.7345
FEMALE 1	-0.091683	0. 025532	-3. 591	0.0003
AFQT 1	0.004182442	0.000945997	4. 421	0.0001
MDAFQT 1	-0.028327	0. 060984	-0.465	0.6424
GPA1Ø 1	-0.00992141	0. 0 22 5 34	-0.440	0. 6598
MDGPA10 1	-0.044071	0.036869	-1.195	0. 2323
CONTR 1	0.045276	0.075 216	0.602	0.5474
LIMCONTR 1	0.046668	0.065646	0.711	0. 4773
CONEXPTR 1	0.029118	0.083145	0. 350	0. 7263
CONC 1	-0.06325 2	0. 05 6423	-1.121	0. 2626
LIMCON 1	0.004185618	0.044473	0.	0. 9250
CONEXP 1	0.014759	0. 052783	0. 28 0	0. 7798
ACAD 1	-0.125896	0.050 373	~2 . 499	0.0126
SRVOC 1	0.048770	0. 0 59198	0. 824	0.4103
SRACAD 1	-0.011091	0.05 0220	-0. 221	0.8253
LMEXP 1	0.001386624	0.0001536232	9. 026	0.0001
TENURE 1	0.010678	0.00288035 3	3.707	0.0002
HOURS 1	0.002427344	0.001249391	1.943	0.0524
SESTEEM 1	0.006718818	0.003356409	2.002	0.0456
ENROLL 1	-0.138972	0. 035567	-3.907	0.0001
POSTØ1 1	0.069950	0.031804	2 . 199	0.0 281
POST23 1	0.063942	0.041931	1.525	0. 1277
POST4M 1	0. 368797	0. 05 9742	6. 173	0.0001



NLS, MONTHLY EARNINGS

DEP VARIA	BLE:	LNMTHPAY			
		SUM OF	MEAN		
SOURCE	DF	SQUARES		F VALUE	PROB>F
MODEL	27	138.547		18.326	0.0001
ERROR	800	224.004		10.020	0.0001
C TOTAL	827	362.551			
ROOT	MSE	0.529155	R-SQUARE	0.3821	
DEP M	EAN	6.548821	ADJ R-SQ	0.3613	
c. v.		8.080164		0.00.0	
	•	PARAMETER	STANDARD	T FOR HØ:	
VARIABLE	DF	ESTIMATE	ERROR	PARAMETER=0	PROB > !T!
				· · · · · · · · · · · · · · · · · · ·	PROD 7 . 1.
INTERCEP	1	5.733601	0. 191952	29.870	0.0001
SES	1	0.001851845	0.001902502	0.973	0.3307
NEAST	1	0.014257	0.082668	0.172	0.8631
SOUTH	1	0.071776	0.077108	0. 931	0.3522
WEST	1.	0.104403	0.075006	1.392	0.1643
RURAL	1	0.040909	0.070276	0.582	0.5607
ENG	1	0.057462	0.066310	0.867	0.3864
FEMALE	1	-0.145291	0.038421	-3. 782	0.0002
AFQT	1	0.004639104	0.001430298	3.243	0.0012
MDAFQT	1	0.098428	0.091953	1.070	0.2848
GPA10	1	-0.047420	0.034045	-1.393	0.1640
MDGPA10	1	-0.038078	0.055749	-0.683	0.4948
CONTR	1	0.176023	0.113536	1.553	0.1214
LIMCONTR	1	0.076299	0.099262	0.769	0.4423
CONEXPTR	1	-0.078175	0.125640	-0.622	0.5340
CONC	1	-0.042825	0.085314	-0.502	0.6158
LIMCON	1	-0.039874	0.067228	-0. 593	0.5533
CONEXP	1	-0.023647	0.079780	-0.296	0.7670
ACAD	1	-0.305333	0.075982	-4.018	0.0001
SRVOC	1	-0.022015	0.089453	-0.246	0.8057
SRACAD	1	0.057 817	0.075890	0.762	0.4464
LMEXP	1	0.002050282	0.0002302643	8. 904	0.0001
TENURE	1	0.015752	0.004350302	3. 621	0.0003
SESTEEM	1	0.007571096	0.005074022	1.492	0.1361
ENROLL	1	-0. 5214 5 0	0.050750	-10.275	0.0001
POSTØ1	1	0.119763	0.048057	2. 305	0.0214
POST23	1	0. 089 <u>6</u> 01	0.063397	1.413	0.1579
POST4M	1	0.560659	0.090042	6. 227	0.0001



DEP VARIABLE: LNHRPAY HS&E, HOURLY EARNINGS

SOURCE DF	SUF CF Scuares	MF AN S C UARE	F VALUE	PROB>F
MODEL 58 ERROR 461 C TOTAL 519	14.611164 50.205910 64.817074	0.251917 0.108907	2.313	0.3001
ROOT MSE Dep mean C.V.	0.330010 1.440991 22.9016	R-SQUARE ADJ R-SQ	0.2254 0.1280	
VARIABLE DF	PARAMETER EST IMATE	ST AND ARD ERR OR	T FOR HO: PARAMETER=0	PRO8 > 111
MGR SALES CLERK CRAFT OPERATE FARMICE PARMICEUP SELFEST MODICCON MODICCON MODICCON ABSENT DISCIPPR MODISPLE MOD	0.033348 0.051692 0.041989 0.003763195 -0.015422 0.085860 -0.026883 -0.016577 0.285670 -0.012776 -0.012776 -0.012776 -0.160848 0.021712 -0.555816 -0.106097 -0.924737	0.0578700 0.0578700	9 10 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1598829047540898618806989453331212540052 25952411184301637678618829265358674358743587435874294872948779336677334265074358749859976502763430184301843018430184301843018430184301



HS&B, MONTHLY EARNINGS

DEP VA	R I	IABLE		LNH	THP	AY
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J 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		- 200.000			
SOURCE	CF	SUM OF Souares	ME AN S QUA RE	F VALUE	PRO8>F
MODEL ERRCR C TOTAL	58 461 519	19.539935 57.869570 77.409505	0.336895 0.125531	2.684	0.0001
ROOT DEP C.V.		0.354303 6.591601 5.375065	R-SCUARE ADJ R-SO	0.2524 0.1584	
V AR IABLE	DF	PARAMETER ESTIMATE	STANDARD ERR CR	T FOP HOS PARAMETER =0	PROB > T
P FR A PECCENTAGE TO SELH POLICIES TO SELH PECCES OF SECURITY SECU	and and the second of the seco	6.415678 -0.034665777 -0.0147657 -0.0147657 -0.0147657 -0.012777165 -0.0135687 -0.0357687 -0.03141697 -0.03141697 -0.03167668 -0.03167668 -0.0487667 -0.0487665 -0.0487665 -0.0487665 -0.0487665 -0.0487665 -0.0566567 -0.0566567 -0.0566566 -0.0566567 -0.056657 -0.05667 -0.05667 -0.05667 -0.05667 -0.0567 -0.0567 -0.0567 -0.0567 -0.0567 -0.0567 -0.0567 -0.0567 -0.0567 -0.0567 -0.0567 -0.0567 -0.0567 -0.0567 -0.0567 -0.0567 -0.0567 -0.0	0.000.000.000.000.000.000.000.000.000.	22974741249402347714272766229368514761191903277449399174 42575798569607697742766467706129368514761191903277449399174 4100000010001111310000200000000000000000	19765697501427973357076947276811904780785422599118793842155 02259980338609956224001891922266907869769999956918793793778 02575748246095699956999909090909090909090909090909



NLS, HOURLY EARNINGS

DEP VARIA	BLE	LNHRPAY			
DEP VIII		SUM OF	MEAN		
SOURCE	DF	SQUARES	SQUARE	F VALUE	PROB) F
MODEL	28	41.273938	1.474069	13.304	0.9001
ERROR	818	90.634443	0.110800		
C TOTAL	846	131.908			
		Ø. 332866	R-SQUARE	0. 3129	
DEP M		1.576017	ADJ R-SQ	ø. 2894	
C. V.	IEHIN	21.12074			
L. V.					
		PARAMETER	STANDARD	T FOR HØ:	
	DF	ESTIMATE	ERROR	PARAMETER=0	PROB > 'T!
VARIABLE	DF	COLIMALE		• • • • • • • • • • • • • • • • • • • •	
INTERCEP	1	ø. 97 0 994	0.144705	6.710	0.0001
SE3	1	0.002922261	0.001750905	1.669	0.0955
NEWST	1	-0.00317797	0.044147	-0.072	0. 9426
SOUTH	i	-0.041810	0.036591	-1.143	ø . 2535
WEST	i	0.079859	0.052348	1.526	0. 1275
RURAL	ī	-0.027640	0.040075	-0.690	ø. 49ø6
ENG	i	0.019666	0.060267	ø. 3 26	0. 7443
FEMALE	i	-0.126353	0.024086	-5. 246	0.0001
AFQT	i	0.003262986	0.0008045852	4.055	0.0001
MDAFQT	i	-0.140842	0.080863	-1.742	0.0819
GPA'0	ì	-0.015873	0.019795	-0.802	0.4229
MDGPA10	i	0.041037	7. 034598	1.186	0.2359
CONTR	i	0.097214	065492	1.484	0.1381
LIMCONTR	i	Ø. Ø69223	. 061184	1.131	0.258 2
CONEXPTR	1	0.153569	ø. 0 83838	1.832	0. 0 674
CONC	1	-0.00331284	0.054002	-0.061	0.95 11
_ -	i	-0.00289892	0.041164	-0.070	0.9439
LIMCON	ī	0.029217	0.051973	0.5 62	0.5742
ACAD	i	ø. ↑58265	0.046120	1.263	0. 2068
SRVOC	i	018615	0.052089	2.277	0 .0 230
SRACAD	i	-0.00080539	0.042787	-0.019	0.9850
LMEXP	1	0.00122458	0.000149325	8.201	0.0001
	1	0.017551	0.002855692	6.146	0.0001
TENURE	1	-0.00139097	0.002006001	-0.693	ø. 48 <i>8</i> 3
HOURS	1	0.006167325	0.002258124	1.893	0.0587
SESTEEM	1	-0.00958901	0.038918	-0.246	0.8054
ENROLL	1	0. 032669	0.031356	1.042	ø. 2978
POSTØ1	1	9. 032003 9. 104939		2.898	0.0039
POST23	1	0. 221654	0.047105	4.706	0.0001
POST4M	7	W. EE1634	0.0	,	



NLS, MONTHLY EARNINGS

DEP VARIA	ABLE:	LNMTHPAY			
		SUM OF	MEAN		
SOURCE	DF	SQUARES	SQUARE	F VALUE	PROB) F
MODEL	27	43. 179119	1.599227	13.007	0.0001
ERROR	819	100.698	0.122952		3,000
C TOTAL	846	143.877			
ROOT	MSE	0.350646	R-SQUARE	0.3001	
DEP N	1EAN	6.742129		0.2778	
C. V.		5.200817		3.2	
			•		
		PARAMETER	STANDARD	T FOR HØ:	•
VARIABLE	DF	ESTIMATE	ERROR	PARAMETER=0	PROB > !T!
				PHARMETER-O	PROD / . 1.
INTERCEP	1	6.094406	0.125448	48. 581	0.0001
SES	1	0.003133789	0.001844125	1.699	0.0896
NEAST	1	-0.013768	0.046501	-0. 296	0.7672
SOUTH	1	-0. 03430 <i>§</i>	0.038528	-0.890	0.3735
WEST	1	0.0 84773	0.055141	1.537	0.1246
RURAL	1	-0.039945	0.042185	-0.947	0.3440
ENG	1	0.005799497	0.063464	0.091	0.9272
FEMALE	1	-0.15896 3	0.025133	-6. 325	0.0001
AFQT	1	0.002955349	0.0008471753	3.488	0.0005
MDAFQT	1	-0.189733	0.085068	-2. 230	0.0260
6PA10	1	-0.023761	0.020837	-1.140	0.2545
MDGPA10	1	0. 025985	0.036403	0.714	0.4755
CONTR	1	0.080811	0.068956	1.172	0.2416
LIMCONTR	1	0.041506	0.064369	0. €.45	0.5192
CONEXPTR	1	0. 133835	0.088274	1.516	0.1299
CONC	1	-0.022482	0.056839	-0.396	0.6926
LIMCON	1	0.003122361	0.043354	0.072	0.9426
CONEXP	1	-0.00728606	0.054616	-0. 133	0.8939
ACAD	1	0.011737	0.048335	0.243	0.8082
SRVOC	1	0. 092879	0.054801	1.695	0.0905
SRACAD	1	-0.016510	0.045042	-0.367	0.7140
LMEXP	1	0.001303302	0.0001571283	8. 295	0.0001
TENURE	1	0. 016001	0.003003068	5. 328	Ø. 0001
SESTEEM	1	0.007783705	0.003426367	2. 272	0.0234
ENROLL	1	-0.017245	0.040984	-0.421	0.6740
POSTØ1	1.	0.031546	0.033029	0. 955	0.3398
POST23	1	0. 093713	0.038116	2. 459	0.0142
POST4M	1	0.246566	0.049572	4. 974	0.0001
				- · ·	=



NLS, HOURLY EARNINGS

DEP VARIABLE:	INERDOV			
DEP VHILLIDEE	SUM OF	MEAN		
SOURCE DF	SQUARES	SQUARE	F VALUE	PROB) F
MODEL 28	51. 514970	1.839820	15.311	0.0001
ERROR 1223	146.955	0. 120160	101 411	0.0001
C TOTAL 1251	198.470	(,, 1E0100		
ROOT MSE	0.346640	R-SQUARE	ø. 2596	
DEP MEAN	1.505444	ADJ R-SQ	0.2426	
C. V.	23.02579	755 11 55	0.2.20	
U. V.	23. 0237 3			
4 7	PARAMETER	STANDARD	T FOR HO:	
VARIABLE DF	ESTIMATE	ERROR	PARAMETER=0	PROB > !T!

INTERCEP 1	0.845491	0.104803	8. 067	0.0001
SES 1	0.002588175	9.00151018	1.714	0.0868
NEGST 1	0.057970	0. 0362 5 1	1. 599	0.1101
SOUTH 1	0.002059344	0.0 28922	0.071	0. 9432
WEST 1	0. 114484	0.043038	2. 660	0.0 079
RURAL 1	0.002988471	.0.035473	Ø. Ø84	0.932 9
ENG 1	-0.048414	0.051696	-0. 937	0. 34 9 2
FEMALE 1	-0.092080	0.020 633	-4.463	0.0001
AFQT 1	0.002616662	2.0007132193	3. 669	0.000 3
MDAFQT 1	-0.053761	0.063166	-0.851	0.3949
GPA10 1	-0.00371692	0. 017067	-0.218	0.8276
MDGPA10 1	0.044535	0.029304	1.520	0. 1288
CONTR 1	0.065737	0.0 62148	1.058	0.2904
LIMCONTR 1	0.076299	0.054418	1.402	0.1611
CONEXPTR 1	0.132712	0.089110	1.657	0.0979
CONC 1	-0.034517	0.0 47216	-0.73.	0.4649
LIMCON 1	0.023506	0. 034628	0. 679	0.4974
CONEXP 1	0.046370	0. 043854	1.057	0.2905
ACAD 1	0.0 18898	0.	0. 501	0. 6166
SRVOC 1	0.0 628 5 4	0.045281	1.388	0. 1654
SRACAD 1	-0.012 <u>99</u> 8	0. 035945	-0. 359	0.7196
LMEXP 1	0.001274188	0.0001344345	9. 478	0.0001
TENURE 1	0.010882	0.00 2355159	4.620	0.0001
HOURS 1	0.003164719		3. 278	0.0011
SESTEEM 1	0.004436495	0.00 27 8 516	1.593	0.1114
ENROLL 1	-0.0 61026	0.029408	-2.075	0.0382
POSTØ1 1	0. 03355 2	0.0275 22	1.219	0.2230
POST23 1	0.045952	0. 031035	1.481	0.1390
POST4M 1	0. 215781	0 . 0 43079	5. 009	0.0001



NLS, MONTHLY EARNINGS

DEP VARIAB	LE:	LNMTHPAY			
		SUM OF	MEAN		
SOURCE	DF	SQUARES	SQUARE	F VALUE	PROB > F
MODEL	27	171.428	6.349190	21.165	0.0001
ERROR 12	24	367.182	0. 299985		
C TOTAL 12	51	538.610			
ROOT M	SE	0.547709	R-SQUARE	0.3 183	
DEP ME		6.418805	ADJ K-SQ	0.303 2	
c.v.		8.532882			
		PARAMETER	STANDARD	T FOR HØ:	
VARIABLE	DF	ESTIMATE	ERROR	PARAMETER=0	PROB > !T!
INTERCEP	1	5.606155	0. 159927	35. 054	0.0001
SES	1	0.005779858	9.0 02383899	2.425	0.0155
NEAST	4	Ø. 188349	0. 0 570 58	3.301	0.0010
SOUTH	1	0.147427	0.045360	3.250	0.0012
WEST	1	0. 224122	0. 067877	3.30 2	0.0010
RURAL	1	-0.036302	0 . 05 6037	-0.648	0.5172
ENG	1	-0 . 05 3627	0.0 81666	-0.657	0.5115
FEMALE	1	-0. 209965	0.032236	-6.513	0.0001
AFQT	1	0. 002484205	0.001126838	2.205	0.0277
MDAFQT	1	-0. 236 9 07	0.099540	-2.380	0.0175
6PA10	1	-0.00871919	0.026963	-0.323	0.7465
MDGPA10	1	-0.019492	0.0 46226	-0.422	0.6733
CONTR	1	0. 122219	0. Ø981 <i>7</i> 9	1.245	0.2134
LIMCONTR	1	0. 05 7406	ø. ø85969	0. 668	0.5044
CONEXPTR	1	0.178901	0. 126575	1.413	0.1578
CONC	1	-0.00480501	0. 074604	-0.064	0.9487
LIMCON	1	0.0 15864	0.0 54713	ø. 290	0.7719
CONEXP	1	··0 . 0 32473	0.0 69198	-0, 469	0.6390
ACAD	1	-0.038411	0.059 544	-0.645	0.5190
SRVOC	1	0. 0 68806	0. 071 5 35	0. 962	0. 3 36 3
SRACAD	1	0.024000	0.05 6793	0.423	0.6727
LMEXP	1	0.002200612	0.0002094662	10.506	0.0001
TENURE	1	0. Ø17561	0.003714298	4.728	0.0001
SESTEEM	1	0. 010232	0.00439423	2.329	0.0200
ENROLL	1	-0. 433807	0.044601	-9.726	0.0001
POSTØ1	1	0.031026	0.043485	0.713	Ø. 4757
POST23	1	-0.045479	0.048908	-0.930	0. 3526
POST4M	1	9. 22267 5	0.068050	3. 272	0.0011



HS&B, HOURLY EARNINGS

DEP VARIABLE: LNHRFAY

DET TANDACEE	- Figure -			
SOURCE DF	SUM OF SQUARES	MF AN Scuare	F VALUE	PROB>F
MODEL 59 ERROR 742 C TOTAL 801	16,444113	0.278714 0.160536	1.736	0.0008
RODT MSE DEP MEAR C.V.	0.400670 1.449485 27.64222	R-SCUARE ADJ R-SQ	0.1213 0.0514	
VARIABLE OF	PARAMETER ESTIMATE	STANDARD ERRCR	T FOR HO: PARAMETER=0	PROB > iTi
INTERCEP INTERC	-0.011897 -0.0213040 -0.015940 -0.015959 -0.01595972 -0.0158772 -0.01528772 -0.01528772 -0.01528772 -0.0151978 -0.061579 -0.0615797 -0.0151978 -0.019782	0.0517899725377261182772611612778900.055184877899722337262437000.0551848973997261188900.055184973997261188900.055184997399539489973953953953953953953953953953953953953953	11.00.15592711650668351464774575503727373231803410777547269899945663877273373231803410777547269899945663847273373231803410777547269899945663847273373231803410777547269899945660773373231803410777547269899945660773373231803410777547269899945660773373231803410777547269899945607733732318034107775472698999456077337323180341077754726989994560773373231803410777547269899945607733732318034107775472698999456077337323180341077754726989994560773373231803410777547269899945607733732318034107775472698999456077337323180341077754726989994560773373231803410777547269899945607733732318034107775472698999456077337323180341077754726989994560773373231803470777547269899945607733732318034707775472698999456077754726989994560777547269899945607775472698999456077754726989994560777547269899945607775472698999456077754726989994560777547269899945607775472698999456077754726989994560777547269899945607775477569899945607775477569899945607775477698999456077754776989994560777547769899994560777547769899945607775477698999456077754776989994560777547769899945607775698999456077756989994560777569899945607775698999456077756989994560777569899945607775698999456077756989999456077756989994560777569899994560777569899994560777569899994560777569899994560777569899994560777569899994560777569899994560777569899994560777569899994560777569899994560777569899994560777569899994560777569899999456077756989999945607756989999945607775698999994560776989999945607698999994560769899999456076989999999999999999999999999999999999	195941786792537805215404208884787878193076614173799204514495382988129881298989898478787878193076611544319920451449538296989898989898989898989898989898989898

ERIC

HS&B, MONTHLY EARNINGS

DEP VARIABLE: LIMTHPAY

SOURCE DF	SUM CF SCUARES	ME AN Scuare	F VALUE	PROB>F
MODEL 59 ERROR 742 C TOTAL 801	85.452211 270.641 306.093	1.448343	4.871	0.0001
ROOT MSE DEP MEAN C.V.	0.545307 (.284846 8.676538	R-SCUARE ADJ R-SQ	0.2792 0.2219	
VARIABLE DF	PARAMETER ESTIMATE	STANDARD ERROR	T FOR HO: PARAMETER=0	PROB > IT!
INTERCEP INTERC	6.51650 -50545072 -0.034072 -0.034072 -0.01756628 -0.017526628 -0.017526628 -0.017526628 -0.01616460 -0.1616460 -0.1616460 -0.1616460 -0.1616460 -0.1616460 -0.1616470 -0.1616470 -0.1616470 -0.1616470 -0.1616470 -0.1616470 -0.1616470 -0.1616470 -0.1616470 -0.1616470 -0.1616470 -0.1616470 -0.1616470 -0.1616470 -0.1616470 -0.1616470 -0.1616470 -0.161670 -0.1616470 -0.16	0.17374499329800 1877946229893298093297965400 187794629893298090 1877979800 1877979800 1877979800 1877979800 1877979800 1877979800 1877979800 1877979800 1877979800 1877990 18779900 1877900 1877900 1877900 1877900 1877900 1877900 1879900 1877900 1877900 1877900 1877900 1877900 1877900 1877	90837943662265511102884718288 360600380495716143792 17557943662265511102884718288 3606000101010101010101010101010101010101	1722335615517720021158396298327823680633 337339200123243312792 09775732255981772002115839629832767945727 637259310832664431 0457757322598102913221332433767945727 63727679991099999999999999999999999999999999



HS&B, HOURLY EARNINGS

DEP VARIA	BLE: LNHRPAY			
SOURCE	SUM OF DF SQUARES			
MODEL	DF SQUARES 65 41.307896		F VALUE 5.367	PROB) F 8. 800 1
	192 377.994	6. 118419	J. 307	0.0001
C TOTAL 3				
ROOT I		R-SQUARE ADJ R-SQ	0.0985	
C. V.	24. 68361	MDJ K-80	9. 9862	
VORTABLE	PARAMETER DF ESTIMATE	STANDARD	T FOR HO:	
V. IN I HOLL	esilmit	ERROR	PARAMETER=0	PROB > !T'
INTERCEP	1 1.263605	0.071536	17.664	0.0001
CONC LIMCON	1 0.042820 1 0.021544	0.021593	1.983	0.0474
CONEXP	1 0.0 21644 1 0.0 16595	0. 019122 0. 021255	1. 132 0. 781	0. 2578 0. 4370
MDTRANS	1 0.050915	8. 8848 67	0.606	0. 4350 6. 3448
ACAD SRVOC	1 0.00 76 0 4766	0.023864	6.319	0.7500
BRACAD	1 -0.00451582 1 0.042671	0. 627467 0. 645678	-9. 165 9. 930	8.869 1
CONTR	1 0.091774	0. 039222	2. 348	0.3524 0.0194
LIMCONTR	1 -0.00871579	0.038863	-0. 224	9.8226
CONEXPTR HISPF	1 0.0 11953 1 0.03462 5	0.0 54812 0.0 20434	0.218 1.694	8, 8274 8, 8983
NATE	1 -0.023089	9.0 44217	-0. 522	0. 6916
BLF OF	1 0.055995	0.021413	2.615	0.0090
HCAP	1 0.063809 1 0.003624899	0. 032745 9. 0 20657	1.949	6.0514
MDHCAP	1 6. 877368	D. 208444	0.175 0.371	0.8E07 0.7.08
ENG2LANG	1 0.043297	●• 438658	1.1.8	0. 2638
MDENELAN SES	1 0.026270 1 0.036415	0.052870 0.010243	8. 497	6. 6193
MDSES	1 -0.211450	Ø. 163930	3. 750 -2. 0 35	0.0002 0.0420
EAST	1 0.028289	0.019203	1.473	0.1408
SOUTH WEST	1 0. 610549 1 0. 659679	0.017137 0.020379	8. 616	0. 5382
LMEXP	1 6.0009680858	0.000261529	2. 928 3. 7 0 2	0.0034 0.0002
MDLMEXP	1 -0.066758	e. 958887	-1. 134	8. 2579
TENURE MDTENURE	1 0.0002957357 1 -0.011776	0.00 02507217 0.0 72608	1.180	0. 2383
TEST	1 0.0008233176	0.001814197	-0. 162 0. 812	0.8712 0.4170
MDTEST ENROLL	1 -9.96 251491 1 -0. 836788	0.063341	-8. 040	0. 9683
POSTO	1 -0.036700 1 0.012684	0. 018496 0. 0 21532	1.984 0. 589	0.0473 0.5559
POST1	1 -0.0044896	0.024275	-0. 185	0. 8533
POST2 INDETER	1 -0.00965983 1 6.024159	8. 943577	-0. 222	0.8246
MDPOST	1 0.030831	6. 626139 6. 644450	1.2 00 0.694	8.2384 8.4888
HORKCOMP	1 0.010355	0.009598013	1.079	0. 2897
MDWKCOMP EIGHT	1 -0.241742 1 0.011529	0. 182936	-1.321	e. 1864
MDEIGHT	1 0.058327	0.014568 0.023283	8. 791 2. 565	0.4288 0.0123
BPA10	1 -0.611235	0.010565	-1.063	0.2877
MDGPA10	1 -0.000693112	0. 027467	-0. 025	0.9799
WORKINHS SPOUSE	1 0.025788 1 -0.004664266	0.017129 0.019451	1 - 505 -0, 034	0. 1324 0. 9728
KID	1 -0.016539	0.025152	-6. 419	0.6752
URBRURAL	1 -0.052266	0.012847	-4.968	9. 9991
PROFTECH MBR	1 0.0 32 0 52 1 0. 11 092 5	0.055110 0.059556	6. 582 1. 863	0.5609 0.0626
SALES	1 -0.679611	0.048456	-1.643	9. 1905
CLERK	1 9. 931266 1 9. 962256863	0.046622	6 . 671	0.5025
OPERATE	1 0.062256863 1 0.058937	0.062976 0.052213	6. 936 1. 129	0.9715 0.2591
FARM	1 0.898928	0.348981	2. 576	0.0100
FARMLAB SERVICE	1 -0.221657 1 -0.042656	0. 103305	· 2. 146	0.0320
PHHSERV	1 -0.042656 1 -0.523012	0. 046925 0. 6 69841	- 0. 90 9 -7. 489	0. 3634 0. 60 01
MDOCCUP	1 -0.117159	0. 1 0996 2	-1.065	0.2868
SELFEST MDSLFEST	1 -0.013935 1 0.155651	9.968758299	-1.591	8. 1117 8. 5218
LOCOFCON	1 0.155651 1 -0.011414	0.31 82 72 0.011435	e. 489 - e. 998	0. 6248 0. 31 8 2
MDLOCCON	1 6. 108680	0. 272689	0. 399	0.6903
ABSENT DISCIPPR	1 0.0080 51297 1 -0.008 245966	0.005076238 0.021909	1.586	0.1128
MDDISPRB	1 0.059594	0. 122035	-8. 911 9. 458	0.9910 0.6253
LAWTRBLE	1 -0.069200	0. 04956 5	-1.3%	0. 1628
MDLAHTRL	1 -0.139207	6. 1 00 955	-1.379	0. 1688



HS&B, MONTHLY EARNINGS

DEP VARIE	ABL E	LNMTHPAY			
SOURCE	25	SUM OF	1 100-1-11-1		
MODEL	DF 65	8QUARES 246, 229		F VALUE	PROB)F
	1192	1920. 603		11.848	0.0001
C TOTAL 3		1866.829			
RUOT		0.565453		8. 1944	
DEP M	EAN	6. 17 83 53		8. 1789	
. c.v.		9. 15216			
		DARAMETER	070,48008	-	
VARIABLE	DF	PARAMETER ESTIMATE		T FOR HØ:	
***************************************		EGITIMIE	EKKUK	PARAMETER=0	PROB > 'T'
INTERCEP	1	6. 335552	0.117547	53. 898	8. 800 i
CONC	1	0.096017	0.035481	2.706	0.9068
LIMCON	1	8. 946 158	0.031421	1.469	0.1419
CONEXP	ı	0. 948486	9. 034926	1.388	0. 1652
MCTRANS ACAD	1	6. 101 154	0.138138	8. 732	0.4641
SRVOC	1	-0. 042968 -0. 020244	6. 039213 0. 045035	-1.096	0.2733
BRACAD	i	305721179	9. 6753 85	-0. 458 0. 376	0.6531
CONTR	1	6. 150705	9. 064450	2. 338	0.9395 0.0194
LIMCONTR	1	-0.038885	0.063858	-0.608	0.5435
CONEXPTR	1	-0.043513	0.090065	-0.483	0.6290
HISPF	1	0.028902	0. 033 577	0. 861	0.3894
NATF BLF	1	-8.019701	0.072656	-8. 271	0. 7863
OF.	1	-0. 010243 9. 018575	0.035185	-6. 291	Ø. 7710
HCAP	i	-0.013266	0. 053807 0. 033944	0. 345 -0. 391	6. 7299
MDHCAP	1	-0.281905	0.3425 12	-0. 823	0.6960 0.4105
ENG2LANG	1	0.986876	0.063523	1.368	6. 1715
MDEN2LAN	1	-0.018442	0. 086875	-8.212	0.8319
SES	1	0.083986	0. 016831	4. 998	0.0001
MDSE8 1AST	1	0.036215	0. 170776	0.212	0.8 321
SOJTH	1	-0. 022232 -0. 045746	0.031554 e .028159	-0.705	0.4811
WEST	i	0. 035640	0. 033486	-1.625 1.964	0.1844
LMEXP	ī		0.000 4297396	2. 605	0. 2873 0. 0 092
MDLMEXP	1	-8. 188597	0.096763	-1.949	0.0514
TENURE			8.00 04119812	0.620	0.5353
MDTENURE	1	6. 221 300	0. 1193 0 9	1.855	0.0637
TEST MDTEST	1	-9. 9991 75524	0.00166651	-9. 105	8. 9161
ENROLL	1	0. 075444 -0. 286329	0. 104081	Ø. 725	0.4686
POSTØ	î	0.0435 12	0. 0303 92 0. 0353 42	-9. 421 1. 230	0.00 01
POST1	1	-0. 155726	0. 0 35888	-3, 904	0. 2189 0. 0 081
POST2	1	-6. 27 588 2	6.071605	-3. 853	0.0001
INDETER	1	-0.013871	0.033093	-0.419	0.6751
MDPOST	1	-0.053461	0.073039	-0. 732	0.464 3
HORKCOMP MDHKCOMP	1	8.943148	0.015771	2. 736	0.0063
EIGHT	i	0.0 56271 0.0 19604	0. 300598 0. 023938	0. 187	0.8515
MDEIGHT	î	0. 966855	0. 023938 0. 0382 5 9	0.819	0.4129
SPA16	1	-0.040021	0.017361	1.747 -2.305	0.0807
MDGPA10	1	9. 044234	P. 045133	0. 980	0.0 212 0.3 271
WORKINKS SPOUSE	1	9. 978987	J. 0 28145	2. 774	0.0056
KID	1	0.026921	0.031962	8.84 2	0. 3997
URBRURAL	î	-0. 048089 -0. 063649	0.041329 0.021110	-1. 164	0.2447
PROFTECH	1	-0.046277	0. 090556	-3. 0 15	0.0026
MGR	1	0.313009	6.0 97861	-2. 511 3. 199	0.6094
SALES	1	-0. 13 95 11	0.079629	-1.752	0. 0 014 0.0799
CLERK	1	0. 026539	0. 0766 0 8	0.346	0. 72 90
OPERATE	1	8. 159568 8. 221103	0. 103461	1. 455	0.1458
FARM	i	6. 221 123 1 . 62 7221	9. 985795	2. 577	0.0100
FARMLAB	i	-0.156754	0. 573440 9. 169749	2. 838	0.0046
SERVICE	1	-6. 085942	0. 8771 8 7	0. 923 1. 115	Ø . 3558
PHHSERV	1	-0. 75 99 47	0.114762	-6. 622	9. 2651 9. 6 001
MDOCCUP SELFEST	1	-0. 00554862	8. 189688	-0.031	0. 9755
MDSLFEST	1	-0.027451	0.014391	-1.907	0. 9566
LOCOFCON	i	-0. 187415 9. 014561	9. 522979	-e. 35a	0.7201
MDLOCCON	i	-0. 148722	0.018789 0.448078	6. 775	9. 4384
ABBENT	1	0.014491	0.008341181	-0.332 1.737	8. 7480
DISCIPPR	1	-6. 030245	0. 036001	-0. 840	0.0824 0.4009
MDDISPRE LAWTRELE	1	0.075577	9. 200 526	8. 377	0. 7063
MDLAWTRL	1	0. 045151 9. 035077	0. 881 444	0. 554	0. 5794
	-	9. 0350 73	0. 165887	6. 211	0.8326





YLS, HOURLY EARNINGS

DEP VARIA	BLE:	LNHRPAY			
		SUM OF	MEAN		
SOURCE	DF	SQUARES	SQUARF	F VALUE	PROB) F
MODEL	31	141.522	4.565220	37. 798	0.0001
	181	384. 198	0.120779	0.10	0.000
	212	525.720			
ROOT		0.347533	R-SQUARE	0. 2692	
DEP M		1.521070	ADJ R-SQ	0.2621	
C. V.		22.84792			
		PARAMETER	STANDARD	T FOR HO:	
VARIABLE	DF	ESTIMATE	ERROR	PARAMETER=0	PROB > !T!
INTERCEP	1	9.650 752	0.064158	10. 143	0.00 01
SES	1	0.002211506	0.0008992629	2. 459	0.0140
NEAST	1	0.078700	0.019430	4. 050	0.0001
SOUTH	1	0. 030419	0.017042	1.784	0.0744
WEST	1	0. 0969 76	0.020389	4. 756	0.00 01
RURAL	1	-0.045865	9.0 1.547	-2.346	0.0190
ENG	1	-0.031704	0.0 31 0 26	-1.922	0.3069
HISF	1	6.073665	0.0 21365	3. 448	0.00 06
BLF	i	0.063225	0.019045	3. 320	0.0 009
NATE	1	0.005451557	0.031110	0. 175	0.8609
OTHF	1	0.007953589	0.021184	0. 375	0.7073
AFQT	1	0.903316471	0.0005163487	6. 423	0.0001
MDAFQT	1	0.012701	0.03540 9	0.359	0. 7199
GPA10	1	0.006620794	0.010635	0. 623	0.53 36
MDGPA10	1	0.011923	0.019552	0.610	0.5420
CONTR	1	0. 082280	0.038192	2. 154	0.0313
CONC	1	-0.042273	Ø. 024680	-1.713	0.0868
LIMCONTR	1	0.023075	0.033304	0.693	Ø. 4884
LIMCON	1	0.003103156	0.020738	Ø. 1 50	0.8811
CONEXPTR	1	-0.00225036	0.046224	-0.049	0.9 612
CONEXP	1	0. 0355 43	0.0 24 8 57	1.430	0.1528
ACAD	, 1	-0.027691	0 . 0 22383	-1.237	0.2161
SRVOC	1	0.011809	0.0 32798	0.360	0.7188
SRACAD	1	0.019800	0. 025 793	0. 768	0.4427
LMEXP	1	0. 001040345	. 00008075434	12.883	0.000 1
TENURE	1	0.013410	0.001491177	8 . 993	0.000 1
HOURS	1		0.0006070557	4. 673	0.0001
SESTEEM	1	0.004230781	0.001661502	2 . 546	0.0109
ENROLL	1	-0. 081 388	0. 018267	-4. 456	0.0001
POSTØ1	1	0. 050 240	0.0 17459	2 . 8 78	0.0040
POST23	1	0.0 62101	0. 02 0 727	2 . 996	0.00 28
POST4M	1	0. 22 8 7 0 8	0. 023220	9 30	0.0001



NLS, MONTHLY EARNINGS

					
DEP VAR	IABLE	LNMTHPAY			
		SUM OF	MEAN		
SOURCE	DF	SQUARES		F VALUE	PROB) F
MODEL	30	436.657		47.542	0.0001
ERROR	3182	974.180	0.306153	3FQ * 1 F	0.0001
C TOTAL	3212	1410.836			
	MSE	0.553311	R-SQUARE	0.3095	
DEP	MEAN	6.410813		0. 3030	
C. V.		8.630906		0.3030	
		PARAMETER	STANDARD	T FOR HØ:	
VARIABLE	DF	ESTIMATE	ERROR	PARAMETER=0	0000 \ 171
				- HINENET EK-B	PROB > !T!
INTERCEP	1	5. 302267	0.099375	E7 756	
SES	1	0.003469233	0.001431534	53. 356 2. 423	0.0001
NEAST	1	0.122780	0.030918		0.0154
SOUTH	1	0.153069	0.026976	3. 971 5. 674	0.0001
WEST	1	0.190093	0.032383	5. 674	0.0001
RURAL	1	-0.082287	0.031116	5. 870	0.0001
ENG	1	-0.025282	0.049395	-2.644	0.0082
HISF	1	0.118445	0. 034005	-0.512	0.6088
BLF	1	0.049076	0.030319	3. 483	0. 000 5
NATF	1	0.029699	0.049 5 23	1.619	0. 1056
(,THF	1	0.003451339		0. 600	0. 5487
AFQT	1	0.003991344	0.033726 0.00082201	0.102	0. 9185
MDAFQT	ī	-0.037426	_	4.856	0.0001
GPA10	1	-0,010161	0.056360	-0.664	0. 5067
MDGPA10	ī	0.023727	0.016930	-0.600	0. 5484
CONTR	ī	0.171630	0.031128	0. 762	0. 446Ø
CONC	ī	0.011709	0.060782	2. 824	0. ଡହ48
LIMCONTR	ī	0.045413	0.039279	0. 298	0. 7656
LIMCON	i	0.007673321	0.053022	0. 856	0.3918
CONEXPTR	i	0.011626	0.033017	0. 232	0. 8162
CONEXP	i	0.027041	0.073594	0. 158	0. 8745
ACAD	i	-0.00732392	0.039574	0. 683	0. 4945
SRVOC	i	0.022010	0.035636	-0. 20E	0. 8372
SRACAD	_		0.05 2217	0. 422	0. 6734
LMEXP	1	0.057 870 0.001825263	0.041062	1.409	0. 1588
TENURE	i	0.022503	0.0001272824	14.340	0.0001
SESTEEM	1		0.00236506	9. 515	0.0001
ENROLL	1	0.008338192	0.002642534	3. 155	0.0016
POSTØ1	1	-0.462837	0. 0 27875	-16.604	0.0001
P08123	1	0.060275	0. 027796	2.168	0. 030 2
POST4M	1	0.024515	0. 032989	0. 743	0.4575
	4	0. 255345	0. 036959	6. 909	0.0001



TABLE C.22 HS&B, HOURLY EARNINGS

CEP VARIABLE: LNHPPAY. SUP OF MEAN SCUARES SQUARE F VALUE PROB>F SOUPCE DF

PROPER 1866 1868.895 0.5394.84 5.444 0.0001					
VARIAPLE DF	FOREL 64 EPPPP 1886 C TCT/L 1950	34.525036 126.895 221.420	0.539454	5.444	0.0001
INTEPCEP 1 0.15361P 0.04995 10.078 0.2011	CEP HEAN	0.314795 1.412493 22.28648	P-SOUARE ACJ R-SC	0.1559 0.1273	
CONFERENCE 1 0.024901 0.024965 1.078 0.2782 C.COMFEREN 1 0.02443 0.0225 C.COMFEREN 1 0.02443 0.0225 C.COMFEREN 1 0.02443 0.0225 C.COMFEREN 1 0.02443 0.0225 C.COMFEREN 1 0.0225 C.COMFEREN	VARIAPLE DF	PAFAMETER ESTIMATE	STANDARD FREDR	T FOR HO: PAR AMETER=0	PROB > [T]
TULDED THE A CHARLESTA WIND TOWN TOWN	COMPANY TO SELECTION OF THE PROPERTY OF THE PR	0.0144581 0.0144581 0.0144581 0.0144581 0.0144581 0.01778898 0.01778898 0.01778898 0.01778898 0.01778898 0.01778898 0.01887985 0.01887985 0.01887985 0.01887988 0.01887988 0.01887988 0.01887988 0.01887988 0.01887988 0.01887988 0.01887988 0.01887988 0.01887988 0.018879888 0.018879888 0.0188798888 0.0188798888 0.0188798888 0.0188798888 0.0188798888 0.0188798888 0.0188798888 0.0188798888 0.0188798888 0.01887988888 0.0188798888 0.0188798888 0.0188798888 0.0188798888 0.0188798888 0.0188798888 0.0188798888 0.0188798888 0.01887988888 0.01887988888 0.01887988888 0.01887988888 0.018879888888 0.01887888888888888888888888888888888888	0.000000000000000000000000000000000000	1010997956208794383963993133151133426422443097701153661564346272444309770115365643466618833043765247	25555888598816118500011700487496611864 781174007979788815988161185000117004874877966644781746799798881898888888888888888888888888888



TABLE C.22 HS&B, MCNTHLY EARNINGS

CEF VARIABLE: ENMTHPAY								
SOUPCE	CF	SUM OF Scuares	MEAN Scuare	F VALUE	PRO8>F			
POPER EPEP 18 C TOTAL 19	64 P6 950	40.216853 217.194 257.411	0.6283PP 0.115161	5.457	0.0001			
PEP ME	SE AN	0.339354 6.536184 5.19193	R-SCUARE ACJ R-SO	8:1562 8:1276				
VARIAPLE	DF	PAFAMETER ESTIPATE	STANDARD ERROR	T FOR HOS FAR AMETER=0	PROB > [T]			
P TO THE PROPERTY OF THE PROP		186101647954644919764449904857755866492915376644990485775586649291537664499048577769676649291539477956768997676767676767676767767676767676767	4209709910091982407#5714172909094970974 00#9# PE61417##174971443 519744984707571891944##7718117457998##7 77#####47######7###################	879241576371202692206108120577135913730 518923423517123998713897368000000000000000000000000000000000000	1365476572334433282797871842360293387877348446065394109827414990662248205853587855627405343433577838782794653966607343357738882188278607342326578000000000000000000000000000000000000			

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NLS, HOURLY EARNINGS

DEP VARI	ABLE	: LNHRPAY			-
		SUM OF	MEAN		
SOURCE	DF	SQUARES	SQUARE	F VALUE	PROB>F
MODEL	31	86. 217536	2.781211	25.389	0.0001
	2089	228.834	0.109542		
C TOTAL (2120	315.051			
ROOT	MSE	0.3309 72	R-SQUARE	0. 2737	
DEP I	MEAN	1.590782	ADJ R-SQ	0.2629	
C. V.		20.8056			
		PARAMETER	STANDARD	T FOR HØ:	
VARIABLE	DF	ESTIMATE	ERROR	PARAMETER=0	PROB > !T!
•					
INTERCEP	1	0. 794010	0.092134	8.618	0.0001
SES	1	0.002007415	0.001045773	1.920	0.0551
NEAST	1	0. 087436	0.023245	3.762	0.0002
SOUTH	1	0.025710	0.020325	1.265	0.2060
WEST	1	0.100180	0.024380	4.109	0.0001
RURAL	1	-0.058159	0.023233	-2.503	0.0124
ENG	1	-0.00176507	0.035564	-0.050	0.9604
HISF	1	0. 080076	0.024455	3. 274	0.0011
BLF	1	0. 0712 0 9	0.022594	3. 152	0.0016
NATF	1	0. 052851	0.034880	1.515	Ø. 1299
OTHE	1	0.0007965599	0.025672	0.031	0. 9752
AFQT	1	0.003782553	0.0006000318	6. 304	0.0001
MDAFQT	1	0.042379	0.041910	1.011	0.3120
GPA10	1	0.0066989 23	0.012367	0.542	0.5881
MDGPA10	1	0.011822	0. 0 22518	0.525	0. 5996
CONTR	1	0.075 223	0.040885	1.840	0.0659
CONC	1	-0.021776	0. 0 28702	-0.759	0.4481
LIMCONTR	1	0.006670685	0.037401	0.178	0.8585
LIMCON	1	-0.00588856	0.024519	-0.240	0.8102
CONEXPTR	1	-0.022295	0.051032	-0. 437	0.6622
CONEXP	1	0.00 6111928	0.029411	0.208	0.8354
ACAD	1	-0.019036	0.027033	-3.704	0.4814
SRVOC	1	0. 022512	0.037527	0.600	0.5486
SRACAD	1	0.006817706	· 0.029621	0. 230	0.8180
LMEXP	1	0. 300993277 5	.00009122648	10.888	0.0001
TENURE	1	0.013748	0.001798033	7.646	0.0001
HOURS	1	-0.00296973	0.001422735	-2.087	0.0370
SESTEEM	1	0.006125415	0.001950553	3. 140	0.0017
ENROLL	1	-0.040684	0. 023376	-1.740	0.0819
POSTØ1	1	0.05 2398	0.019633	2. 66 9	0.0077
POST23	1	0. 067505	0. 024126	2.798	0.0052
POST4M	1	0. 227721	0.0259 23	8. 785	0.0001



NLS, MONTHLY EARNINGS

DEP VARIA	BLE:	LNMTHPAY			
		, SUM OF	MEAN		
SOURCE	DF	SQUARES	SQUARE	F VALUE	PROB) F
MODEL.	30	89. 183869	2.972796	25.008	0.0001
	90	248.449	Ø. 118875	C3. 000	0.0001
C TOTAL 21		337-633	0.1100.0		
ROOT M		Ø. 34 → 783	R-SQUARE	Ø. 2641	
DEP ME		6.743863	ADJ R-SQ	0. 2536	
C. V.		5. 112538	HD3 K 30	Ø, 2000	
3. 4.		0	•		
		PARAMETER	STANDARD	T FUR HØ:	
VARIABLE	DF	ESTIMATE	ERROR	PARAMETER=0	PROB > !T!
	-				
INTERCES	1	5. 797959	0.077017	75.282	0.0001
SES	1	0.002068138	0.001089403	1.898	0.0 578
NEAST	1	0. J81594	0.024212	3.370	0.0008
SOUTH	1	0.03842.	0.021150	1.817	ð. 06 34
WEST	1	0.115464	0.025367	4.552	0.0001
RURAL	1	-0.052733	0.024204	-2.179	0.0295
ENG	1	-0.00980063	0.037039	-0.265	0.7913
HISF	1	0.072039	0.925464	2.829	0.0047
BLF	1	0.069498	0.023518	2.572	0.0102
NATE	1	0.046 - 37	0.036335	1.345	0.1786
OTHF	1	0.006918091	0.026739	0.259	0.7959
AFQT	1		0.0006250928	5.947	0.0001
MDAFQT	1	0.039068	0.043658	6.895	0.3710
GPA10	1	0.003680112	0.012882	0. 286	0.7 752
MDGPA10	1	0.069341096	0.023458	0.398	0.6905
CONTR	1	0.060431	0.042570	1.420	0. 1559
CONC	1	-0.026400	0.029897	-0.883	0. 37 7 3
LIMCONTR	1	-0.011670	0.038936	-0.300	0. 7644
LIMCON	1	-0.019174	0.025523	-0.751	0.4526
CONEXPTR	1	-0.047125	0.053129	-0.887	0. 3752
CONEXP	1	0.004365656	0.730637	0.142	0.8867
ACAD	1	-0.032716	0.028139	-1.163	0.2451
SRVOC	1	0.011274	0.039078	0.289	0.7730
SRACAD	1	-0.013597	0.030814	-0.441	0.6591
LMEXP	1		.00009499324	10.862	0.0001
TENURE	ī	0.012942	0.001871844	6. 914	0.0001
SESTEEM	i	0.007458557	0.002028914	3. 676	0.0002
ENROLL	1	-0.943516	0.02-351	-1.787	0.9741
POSTØ!	ī	0.050244	0.020449	2. 457	0.0141
P0ST23	i	0.077987	0.025123	3. 104	0.0019
POST4M	ī	0.241980	0.026991	8. 965	0.0001
	-	U	~- ~	0. 200	~



HS&B, HOURLY EARNINGS

DEP VARIABLE: LNHRPAY

NED ANKINRE	EILNHRPAY SUM OF	MEAN		
BOURCE D			F VALUE	PROB) F
MODEL 5			4. 229	0.8001
ERROR 126			7.663	0.0001
C TOTAL 132				
ROOT MS		R-SQUARE	8. 1624	
DEP MEA	N 1.404882		0.1240	
C.V.	22. 389 37			
	PARAMETER	STANDARD	T FOR HOL	
VARIABLE DI	F ESTIMATE	ERROR	PARAMETER-0	PROB > 'T'
	1 1.168295		11.771	0.0001
	1 0. 059126	0.028965	2. 841	0.0414
	0.041424	9. 028220	1.468	8.1424
	0.049195	0.030217	1.628	0.1038
	l 0.29 27 98 1 0.00 87 0 5323	0.1269 0 8	1.598	0.1103
	1 0.008 7 <i>0</i> 5323 1 -0.020 969	0.038683 0.039798	0. 225 - 0. 527	0. 8220 0. 5984
	9. 9 67488	0.033758	0. 915	0.3604
	0.172113	0.054149	3. 179	0.0015
	8. 426734	0. 659335	0. 451	0.6524
	-0. 043600	0.10-158	-6. 487	0.6842
	-0.029653	9787د۔ ۔ 6	-0.963	0, 3357
	0.512491	0.160396	3. 195	0.0014
MDENSLAN :	1 -0. 163975	0. 9 89 8 59	-1.825	0.0 683
8E S	0.016581	0.015814	1.048	ø. 2946
	i -0. 221342	0. 1 509 95	-1.475	8.1485
	0.015976	0.027689	0. 577	0.5640
	0.0005138755	0.024709	0.021	0. 9834
	0. 040854	0. 030374	1.323	8. 1868 2. 2222
		0.0003749431	2. 979	0. 0029
MDLMEXP :	1	0.101526 0.0003494982	0.196 -0.188	0.8443 0.8513
	-0. 1 13468	0.117348	-0. 966	e. 3349
	0.003342572	0.001477248	2, 263	9. 9238
	-0. 678475	0.088842	-0.883	0.3772
ENROLL		0.028109	-0.622	0.5341
POSTØ 1	9.00 2126 0 9	0.029015	0. 073	0. 9416
POST1 1		0.0 36912	-0.8 63	0. 3881
POST2 1		8.08 2741	-0. 024	0. 9810
INDETER 1		0.026547	0. 375	0.7080
MDPOST 1		0.071652	9. 325	Ø. 7455
WORKCOMP :		0. 013877 0. 319637	0. 524 -0. 98 2	0. 6005 0. 9343
MDWKCOMP 1		0.020961	0. 236	0. 8132
MDEIGHT 1		0.036126	1.966	8.0495
BPA10		0.015937	-0. 199	0.8422
MDGPA10 1		0.040860	6. 522	0.6017
WORKINHS 1	9. 817759	3.026559	v. 669	9. 5038
SPOUSE 1	-0.00273737	0. 025253	-0.108	0. 9137
K1D 1		0.037663	-0.654	9.5135
URBRURAL 1		0.018279	-1.901	0. 0575
PROFTECH 1		0. 076743	0.214	0. 8392 0. 2308
MGR 1		0. 076496 0. 057113	1.199 -1. 9 26	0.2300 0.0543
CLERK 1		9. 0633 42	0. 145	0. 8845
CRAFT 1		0.081900	0.050	0.9599
OPERATE 1		0.068937	9. 395	6. 4845
FARM 1		0.324258	2.611	0.0091
FARMLAR 1	-0. 243925	0. 144 60 6	-1.687	0.6919
SERVICE 1		0.063623	-1.265	0. 2061
PHHSERV 1		0.098619	-7. 158	0.0001
SELFEST 1		0.012681	-1.085	9.2783
MDSLFEST 1		0.588 161	-0. 061 0. 363	0.9515
HOLOCCON 1		9. 0172 0 9 0. 331579	0. 471	0.7163 0.6375
ABSENT 1		0. 3315/9 0. 00 7146684	a. 774	0. 4393
DISCIPPR 1		0.032682	8. 264	6. 7917
LAWTRBLE 1		8. 27774A	-1.428	0. 1537
MDLAHTRL 1		0. 162501	0. 354	8. 7232



HS&B, MONTHLY EARNINGS

SOURCE DF SOURCE SOURCE F VALUE SOURCE ERROR 1265 147.538 0.116631 0.0001 0.	DEP VARIS	ABLE	: LNMTHPAY SUM OF	MEAN		
MODEL 58 29.768922 6.513257 4.491 6.8961	SOURCE	DF			F VALUE	DBUB/E
ERROR 1265 147.536 6.116631 C TOTAL 1323 177.387 ROOT MSE	MODEL	58				
ROOT MSE			147.538	0.116631		
DEP MEAN C. V. 5. 529971 DEP MEAN C. V. 5. 529971 DEP MEAN C. V. 5. 289971 DEP MEAN C. V. DEP MEAN C. V			,			
C. V. S. 229571 VARIABLE DF ENTIMATE ENTEMATE ERROR PARAMETER=® PROB) 'T' INTERCEP				.,		
VARIABLE DF ESTIMATE ESTIMATE ERROR T FOR 10: 17: 11 TYPE CEPT 1 6.324139 0.107809 58.660 0.0001 17: 11 TYPE CEPT 1 6.324139 0.107809 58.660 0.0001 17: 11 TYPE CEPT 1 6.324139 0.107809 58.660 0.0001 17: 11 TYPE CEPT 1 6.324139 0.107809 58.660 0.0001 17: 12 0.0001 17:		EAN		ADJ R-80	0. 1297	
VARIABLE DF ESTIMATE ERROR PARAMETER=© PROB) 'T' INTERCEP 1 6.324139 0.197809 58.668 0.8001 CDNC 1 0.039785 0.031461 1.265 0.2063 LIMCON 1 0.048541 0.036551 1.584 0.1135 CONEXP 1 0.048542 0.032651 1.396 0.1628 MOTRANS 1 0.175382 0.137844 1.272 0.2035 RCAD 1 -0.013296 0.042016 -0.364 0.7159 RKVOC 1 -0.025785 0.043228 -0.595 0.5522 SRACAD 1 0.078202 0.080106 0.876 0.3010 CONTR 1 0.181022 0.0558615 3.076 0.3010 CONEXP 1 -0.073635 0.116392 -0.633 0.5271 LIMCONT 1 0.027484 0.064448 0.426 0.6698 CONEXPTR 1 -0.073635 0.116392 -0.633 0.5271 HCAD 1 -0.13579 0.174218 3.682 0.0063 MDENBLAN 1 -0.13579 0.15392 0.0687 0.0499 EBB 1 0.025732 0.11777 1.498 0.1344 MDESE 1 -0.133759 0.15393 0.862 0.0063 MEST 1 0.00632934 0.15393 0.860 0.806 0.876 MEST 1 0.00632934 0.05303 0.0300 0.820 0.421 MENDE 1 -0.00523340 0.033040 0.060 0.806 0.	L. V.		3. 2E93/1			
VARIABLE DF ESTIMATE ERROR PARAMETER=© PROB) 'T' INTERCEP 1 6.324139 0.197809 58.668 0.8001 CDNC 1 0.039785 0.031461 1.265 0.2063 LIMCON 1 0.048541 0.036551 1.584 0.1135 CONEXP 1 0.048542 0.032651 1.396 0.1628 MOTRANS 1 0.175382 0.137844 1.272 0.2035 RCAD 1 -0.013296 0.042016 -0.364 0.7159 RKVOC 1 -0.025785 0.043228 -0.595 0.5522 SRACAD 1 0.078202 0.080106 0.876 0.3010 CONTR 1 0.181022 0.0558615 3.076 0.3010 CONEXP 1 -0.073635 0.116392 -0.633 0.5271 LIMCONT 1 0.027484 0.064448 0.426 0.6698 CONEXPTR 1 -0.073635 0.116392 -0.633 0.5271 HCAD 1 -0.13579 0.174218 3.682 0.0063 MDENBLAN 1 -0.13579 0.15392 0.0687 0.0499 EBB 1 0.025732 0.11777 1.498 0.1344 MDESE 1 -0.133759 0.15393 0.862 0.0063 MEST 1 0.00632934 0.15393 0.860 0.806 0.876 MEST 1 0.00632934 0.05303 0.0300 0.820 0.421 MENDE 1 -0.00523340 0.033040 0.060 0.806 0.			DOROMETER	STANDARD	T FOR HA.	
INTERCEP 1 6. 324139 0. 187889 58. 658 0. 0001 CONC 1 1 0. 035785 0. 031461 1. 265 0. 2063 LIMCDN 1 0. 045541 0. 036551 1. 584 0. 1135 CONEYD 1 0. 045541 0. 036551 1. 396 0. 1628 MDTRANS 1 0. 175382 0. 137844 1. 272 0. 2035 ACAD 1 -0. 015295 0. 043228 -0. 595 0. 5552 SRYCIC 1 -0. 025785 0. 043228 -0. 595 0. 5552 SRYCIC 1 -0. 025785 0. 043228 -0. 595 0. 5552 SRYCIC 1 -0. 025785 0. 043228 -0. 595 0. 5552 SRYCIC 1 -0. 025785 0. 043228 -0. 595 0. 5552 SRYCIC 1 -0. 025785 0. 043228 -0. 595 0. 5552 SRYCIC 1 -0. 025785 0. 043228 -0. 595 0. 55522 SRYCIC 1 -0. 027454 0. 056444 0. 064448 0. 426 0. 6594 CONTR 1 0. 181022 0. 058615 3. 078 0. 0021 LIMCONTR 1 0. 027484 0. 064448 0. 426 0. 6594 CONEYDTR 1 -0. 022979 0. 033440 0. 6637 0. 5271 MCAP 1 -0. 022979 0. 033440 0. 6687 0. 4521 MDENELAN 1 -0. 195042 0. 097603 -1. 998 0. 0459 SES 1 0. 025732 0. 017177 1. 498 0. 0459 SES 1 0. 025334 0. 153030 -0. 628 0. 1344 MEST 1 0. 062891093 0. 153030 -0. 628 0. 1344 MEST 1 0. 062891093 0. 0153030 -0. 628 0. 1344 MEST 1 0. 062933986 0. 0204072534 2. 342 0. 0193 MDLHEXP 1 0. 06032734 0. 025633 -0. 236 0. 6136 MDTENJER 1 0. 0009377242 0. 00007396159 0. 231 0. 0177 MDTENJER 1 0. 0009377242 0. 00007396159 0. 231 0. 0177 MOTENJER 1 -0. 007152 0. 017451 -0. 669 0. 55451 TENT 1 0. 003366861 0. 1016073 0. 379 0. 2559 MDTENJER 1 -0. 08771725 0. 017311 0. 667 0. 1682 MDGRINHS 1 -0. 08771725 0. 019637 0. 379 0. 7989 MDRICOMP 1 -0. 013320 0. 016073 0. 379 0. 7989 MDRICOMP 1 -0. 013320 0. 0160954 0. 019634 0. 05963 0. 05969 MDRICOMP 1 -0. 013320 0. 0160954 0. 05969 MDRICOMP 1 -0. 013320 0. 0160954 0. 05973 0. 379 0. 7989 MDRICOMP 1 -0. 013320 0. 0160954 0. 05973 0. 379 0. 7989 MDRICOMP 1 -0. 013320 0. 0160954 0. 05969 MDRICOMP 1 -0. 013320 0. 0160954 0. 0596	VARIABLE	DF				DROR) IT!
CONC LINCON LINCON LINCON LINCON LINCON LONEXP LONE						,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
LINCON 1 0.048541 0.030651 1.584 0.1133 CONEXP 1 0.045032 0.13284 1.272 0.2033 CADD 1 0.05296 0.042016 0.3264 0.7159 RRADD 1 0.015296 0.042016 0.3264 0.7159 RRADD 1 0.082795 0.043228 0.555 0.5522 SRACAD 1 0.072062 0.080106 0.876 0.3816 CONTR 1 0.181022 0.0558015 3.078 0.0621 1.1HCONTR 1 0.181022 0.0558015 3.078 0.0621 1.1HCONTR 1 0.027484 0.064448 0.426 0.6569 0.5271 1.1HCONTR 1 0.027484 0.064448 0.426 0.6569 0.5271 1.1HCONTR 1 0.027484 0.054448 0.426 0.6593 0.5271 1.1HCONTR 1 0.027484 0.054448 0.426 0.6693 0.5271 1.1HCONTR 1 0.027484 0.054448 0.426 0.6693 0.5271 1.1HCONTR 1 0.02279 0.033480 0.667 0.4921 0.1HCONTR 1 0.02279 0.033480 0.667 0.4921 0.1HCONTR 1 0.02279 0.033480 0.667 0.4921 0.1HCONTR 1 0.02279 0.033480 0.0667 0.667 0.4921 0.1HCONTR 1 0.092891893 0.116392 0.0890 0.0993 0.04397 0.15830 0.0893 0.04397 0.15830 0.0893 0.04397 0.0802 0.0993 0.03497 0.0802 0.0993 0.03497 0.0802 0.0993 0.03497 0.0802 0.0993 0.03497 0.0802 0.0993 0.03497 0.0802 0.0993 0.03497 0.0802 0.0993 0.03497 0.0802 0.0993 0.03497 0.0802 0.0993 0.03497 0.0802 0.0993 0.03497 0.0802 0.0993 0.0993 0.03497 0.0802 0.0993		_		0. 19780 9	58.660	9. 9991
COMEXP 1					1.265	0. 2063
MDTRANS						0. 1 1 35
ACAD 10.015296 0.043228 -0.354 0.7159 BRYOC 1 -0.025705 0.043228 -0.5955 0.5522 BRACAD 1 0.076202 0.080106 0.676 0.3610 CONTR 1 0.181022 0.055815 3.078 0.0621 LINCONTR 1 0.027484 0.064448 0.466 0.6660 CONEXPTR 1 -0.073635 0.116392 -0.633 0.5271 HCAP 1 -0.025797 0.033440 -0.667 0.4921 ENGELANG 1 -0.627619 0.174218 3.662 0.0093 MDENZLAN 1 -0.195042 0.097603 -1.998 0.0459 BES 1 0.025732 0.017177 1.498 0.0459 BES 1 0.025732 0.017177 1.498 0.0459 BES 1 0.025732 0.017177 1.498 0.0459 BES 1 0.02573508 0.0904072534 0.03675 BES 1 0.08533934 0.036075 0.096 0.9234 BULHEXP 1 0.08632934 0.036075 0.096 0.9234 BULHEXP 1 0.08632934 0.035334 1.474 0.193 BULHEXP 1 0.08632934 0.035334 1.474 0.193 BULHEXP 1 0.08632934 0.035075 0.036 0.0949 BULHEXP 1 0.08632934 0.035075 0.036 0.0949 BULHEXP 1 0.08632934 0.035075 0.036 0.0949 BULHEXP 1 0.08632934 0.036075 0.036075 0.096 0.9234 BULHEXP 1 0.08632934 0.036075 0.036075 0.056 0.0573 BUTCHURE 1 0.08632934 0.036075 0.036075 0.056 0.0573 BUTCHURE 1 0.0863311 0.110274 0.211 0.8326 BUTCHURE 1 0.086346 0.000675045 0.000750159 0.231 0.8173 BUTCHURE 1 0.0863686 0.0006472832 0.000750159 0.231 0.8173 BUTCHURE 1 0.0863686 0.00064548 2.411 0.0166 BUTCHUR 1 0.0863686 0.00160548 2.411 0.0166 BUTCHUR 1 0.0863686 0.00160548 2.411 0.0166 BUTCHUR 1 0.0863686 0.00160548 2.411 0.0166 BUTCHUR 1 0.0863676 0.03633 0.15073 0.379 0.7948 BUDHITCHUR 1 0.086376 0.039239 1.607 0.1962 BUDHITCHUR 1 0.086377 0.031515 0.606 0.9949 BURNING 1 0.086377 0.031515 0.0669 0.9447 BURNING 1 0.086377 0.031515 0.0669 0.9447 BURNING 1 0.086377 0.031515 0.0669 0.9447 BURNING 1 0.086377 0.03507 0.039239 1.607 0.1962 BURNING 1 0.086377 0.039239 1.607 0.1962 BURNING 1 0.086377 0.039399 1.6081 0.0973991 0.096731 0.095399 0.1681 0.09577811 0.09577811 0.0957781 0.095599 0.095999 0.1681 0.09577811 0.09577811 0.095899 0.1681 0.09577811 0.09577811 0.095899 0.1681 0.09577811 0.0963999 0.1681 0.09577811 0.0958999 0.1681 0.0959999 0.1681 0.0959999 0.0969999 0.1681 0.09599999 0.0969999 0.1681 0.09599999 0		_				
SRYOC						
SRRCAC CONTR 1		_				
CONTR 1	SRACAD					
LINCONTR 1 -0.073635 -0.16392 -0.633 0.5271 HCAP 1 -0.072635 -0.116392 -0.633 0.5271 HCAP 1 -0.022979 0.033440 -0.687 0.4921 ENGELANS 1 -0.195042 0.097603 -1.998 0.0403 RDENELAN 1 -0.195042 0.097603 -1.998 0.0459 SES 1 0.023732 0.017177 1.498 0.1344 MDBES 1 -0.133750 0.163030 -0.820 0.4121 EAST 1 0.062891993 0.038975 0.096 0.9234 SOUTH 1 -0.062891993 0.038975 0.096 0.9234 SOUTH 1 -0.06432934 0.0258338 -0.236 0.8136 MEST 1 0.049413 0.033534 1.474 0.1409 LIMEXP 1 0.069539086 0.0004072534 2.342 0.0193 MDL MEXP 1 0.023311 0.110274 0.211 0.8326 TENURE 1 -0.077152 0.127461 -0.605 HDL MEXP 1 -0.077152 0.127461 -0.605 ENROLL 1 -0.086846 0.001604548 2.411 0.0160 MDTEST 1 -0.086846 0.001604548 2.411 0.0160 MDTEST 1 -0.000199777 0.031515 -0.006 0.9949 POST2 1 -0.013320 0.090973 -0.254 0.251 INDETER 1 -0.05246835 0.0909993 -0.567 0.5709 POST2 1 -0.013320 0.090971 -0.21515 PODST2 1 -0.00346845 0.001604548 2.411 0.0160 MDPOST 1 -0.022728 0.040993 -0.567 0.5709 POST2 1 -0.013320 0.090971 -0.21515 -0.006 0.9949 POST2 1 -0.013320 0.090971 -0.21515 -0.006 0.9949 POST2 1 -0.013320 0.090971 -0.254 0.7959 MDRIKCOMP 1 0.005711725 0.015073 0.379 0.7048 MDRIKCOMP 1 -0.005717175 0.015073 0.379 0.7048 MDRIKCOMP 1 -0.005717175 0.015073 0.379 0.7048 MDRIKCOMP 1 -0.00577511 0.022767 -0.254 0.7997 MDETIGHT 1 -0.0032049 0.044381 0.069 0.9447 MORKINHS 1 0.063275 0.040909 -1.661 0.5391 MDRINCOMP 1 0.0032479 0.033038 0.07311 0.056 MDRICOMP 1 0.0032477 0.03303 0.07311 0.056 MDRICOMP 1 0.0032477 0.03303 0.00909 0.0160 0.090909 MDRIKCOMP 1 0.00571775 0.015073 0.0750 0.0550	CONTR	1				
HCAP		_	8. 6 27484	0.064448	0.426	
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MDLOWTRL 1 -A GARRESO A ABROCK			_			
	PDLAWTRL	1	-0. 045579	9. 176505		



NLS, HOURLY EARNINGS

DEP VARIABLE:	LNHPPAY			
	SUM OF	MEAN		
SOURCE DF	SQUARES	SQUARE	F VALUE	PROB) F
MODEL 35	49. 545253	1.415579	12.731	0.0001
ERROR 1023	113.746	0.111189		
C TOTAL 1058	163.291			
ROOT MSE	0.333449	rSQUARE	0.3034	
DEP MEAN	1.606367	ADJ R-SQ	0.2796	
C. V.	20.75799	,, ,,		
				
	PARAMETER	STANDARD	T FOR HØ:	
VARIABLE DF	ESTIMATE	ERROR	PARAMETER=0	PROB > !T!

INTERCEP 1	0.853120	Ø.132165	6. 455	0.0001
SES 1	0.0029095	0.001748101	1.664	0.0963
NEAST 1	0, 165273	0.030941	3 . 435	0.0006
SOUTH 1	0. 036942	0.027733	1. 332	0.1831
WEST 1	0.105067	0.034704	3. 028	0.0025
	-0.062488	0.031640	-1. 975	0.0485
RURAL 1		0.031040 0.091036	0.608	0.5432
MDRURAL 1	0.055372	0.052134	-0.662	0.5080
ENG 1	-0.034526		4. 393	0.0001
AFQT 1	•	0.0009332261	1.626	0.1043
MDAFQT 1	0.110749	0.068114	0. 747	0. 4553
6PA10 1	0.013440	0.017995		0. 4333 0. 8344
MDGPA10 1	-0.00730456	0.034932	-0.209	0.3851
CONTR 1	0.048533	0.055861	0. 869	0.5091
CONC · 1	0.025789	0.039050	0. 660	
LIMCONTR 1	-0.012832	0.054130	-0. 237	0.8127 0.5388
LIMCON 1	-0.021775	0.035508	-0.613	0.5399
CONEXPTR 1	-0.010619	0.082198	-0.129	0.8972
CONEXP 1	-0.016223	0.041740	-0. 389	0.6976
ACAD 1	-0.00375014	0.036673	-0.102	0.9186
SRVOC 1	0. 0 35726	0.0 61266	0. 583	0.5599
SRACAD 1	0. 043293	0. 045 0 95	0. 960	0.3373
LMEXP 1	0.0008950422	0.0001324198	6. 759	0.0001
TENURE 1	0. 018570	0. 002805587	6.619	0.0001
HOURS 1	-0.00287835	0.001982536	-1.452	0.1468
SESTEEM 1	0.002093562	0.002788724	0. 751	0.4530
MDESTEEM 1	0. 022507	0. 071158	0. 316	0.75 18
NEPOSTØ 1	0.071865	0.039300	1.829	0.0 677
NEPOST1 1	-0. ()25951	0.040137	-0.649	0.5164
NEPOST2 1	0.039609	0.043474	0. 911	0. 3625
NEPOST3 1	0. 11524E	6.077438	1.488	0.1370
NEPOSTAM 1	0. 227458	ø. 03775 7	6. 024	0.0001
POSTO 1	0. 035856	0.0559 16	0.641	0.5215
	0.0003099499	0.070742	0. 004	ø. 9965
POST2 1	-0.022166	0.067701	-0. 327	0.7434
POST3 1	-0.095434	0.086138	-1.108	0. 2682
POSTGTE4 1	0.208445	0.074568	2. 795	0.0053



NLS, MONTHLY EARNINGS

DEP VAR	ABLE	: LNMTHPAY			
		SUM OF	MEAN		
SOURCE	DF	SQUARES		F VALUE	PROB) F
MODEL	34	51.898540	1.526428	12.579	0.0001
ERROR	1024	124.258	0. 121345		
C TOTAL	1058	176. 15€	,		
	MSE	0.348347	R-SQUARE	0.2946	
	MEAN	6.762028	ADJ R-SQ	0.2712	
c.v.		5. 151513			
	_	PARAMETER		T FOR HØ:	
VARIABLE	DF	ESTIMATE	ERROR	PARAMETER=0	PROB > !T!
INTERCEF		5.865935		52. 466	0.0001
SES	1	0.002877985		1.576	0.1153
NEAST	1	0.105541	0. 032324	3. 265	0.0011
SOUTH	1	0.050195		1.735	0.0831
WEST	1	0. 125057	0.036178	3. 457	0.0006
RURAL	1	~0.056831	0.033044	-1.720	0.0858
MDRURAL	1	0.018398		0.194	0. 8465
ENG	1	-0.032510	0.054463	-0.597	0 . 5 507
AFQT	1	0.004287068	0.000974848	4.398	0.0001
MDAFQT	1	0.126976	0.071137	1.785	0.0746
GPA10 MDGPA10	1	0.010825	0.018797	0.576	0. 5648
CONTR	1	-0.0080891	0.036491	-0. 222	0.8 246
CONC	- 1	0.025183	0. 058297	0.432	0. 6659
	1	0.007693407	0.040744	0.189	0.850 3
LIMCONTR LIMCON		-0.030046	0.056525	-0.532	0. 5952
CONEXPTR	1	-0.030757	0.037080	-0.829	0.4070
CONEXP	1 1	-0.043089	0.085810	-0.502	0.6157
ACAD	1	-0.017420	0.043602	-0.400	0.6896
SRVOC		-0.00759848	0.038309	-0.198	0.8428
SRACAD	1 1	0.021302 0.028205	0.063971	0.333	0.7392
LMEXP	1	0.0009443228	0.047080	0. 599	0. 5492
TENURE	1	0.018127	0.0001382313 0.002930476	6.831	0.0001
SESTEEM	1	0.002494976	0.002912864	6. 186 0. 957	0.0001
MDESTEEM	_	-0.00600394	0.002912864 0.074304	0. 857	0.3919
NEPOSTØ	i	0.064863	0.041042	-0.081	0.935 6
NEPOST1	1	-0.042382	0.041886	1.580	0.1143
NEPOST2	1	0.049764	0.045399	-1.012	0.3119
NEPOST3	1	0.129601	0.080891	1.096 1.6 0 2	0. 2733
NEPOST4M		0. 236162	0. 039438		0.1094
POSTØ	1	0.031650	0.058411	5. 988 0. 542	0.0001
POST1	1	-0.019323	0.03871	-0. 262	0. 5880
POST2	1	-0.00294605	0.073671 0.070676	-0. 262 -0. 042	0. 7937
POST3	1	-0.107084	0.089986	-1.190	0. 9668
POSTGTE4	ī	0.202835	Ø. 077899	2.6 0 4	0.2343 0.0094
	_			L. 004	J. 0074



HS&B, HOURLY EARNINGS

DEP VARIABLE	LNHRPAY			
SOURCE DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PROB) F
MODEL 60		e. 512459	4.626	6. 8881
ERROR 2130	235, 933	0.110767		
C TOTAL 2190			A 1157	
ROOT MSE DEP MEAN		R-BQUARE ADJ R-9Q	9.1153 6.0904	
C. V.	24, 11755	NDS N-Su	0.020	
				
	PARAMETER	STANDARD	T FOR HO:	0000 \ 174
VARIABLE DF	ESTIMATE	ERROR	PARAMETER=9	PROB > !T!
INTERCEP 1	1.254239	6.085471	14.674	6. 0001
CONC 1		0.024645	2.442	0. 0147
LIMCON 1		0.023189	0.712	8. 4768
CONEXP 1		6. 825 126 6. 1829 87	1.393 1.783	0.1926 8.0888
MDTRANS 1 ACAD 1		e. 027363	-0. 139	6. 889 3
SRVOC 1		0.033262	-0.409	0.6825
BRACAD 1		0.054900	0.782	9. 4344
CONTR 1		0.849284	2. 084 9. 597	0. 0373 8. 5509
LIMCONTR 1		0. 0465 91 0. 0 74727	-0. 3 9 3	0. 7617
CONEXPTR 1		9. 925481	0. 196	0. 8444
ENGSLANG 1		9. 159856	1.628	6. 1 83 6
MDENSLAN 1		0.066872	-0.929	6.3530
SES 1		0. 0 12556 0. 154459	4.115 -1.508	9. 6001 6. 1316
MDSES 1 EAST 1		0. 022731	1. 167	8.2433
SOUTH 1		6. 929582	8.786	0.4319
WEST 1	0.064823	8. 62556 7	2.541	0.0111
LMEXP 1		0.0003127689	2.567 -0.786	0.0103 0.4321
MDLMEXP 1		0.068797 0.000 28932 0 2	9, 878	e. 3800
TENURE 1		0.066713	6. 849	0.9689
TEST 1		0.001230828	1.597	9. 1329
MOTEST 1		8.081098	-0. 328	0.7432 0.0485
ENROLL 1	·	9. 6 22566 6. 6 26186	-1.974 0.832	0. 4056
PUSTO 1 POST1 1		0.029671	-0.441	0. 6593
POST2 1		0. 053675	-0. 317	0. 7515
INDETER 1		0.023737	6. 951	0.3429 0.1006
MDPOST 1		0. 056908 0. 011325	1.642 1.717	0. 9861
HORKCOMP 1		6. 26 50 62	-0.916	6. 3599
EIGHT 1	·	0.017428	-0. 935	0. 9723
MDEIGHT 1		0.030810	1.864	0.0 624
BPA10		9.913059 9.935910	-1.510 -0.275	0.1312 0.7832
MDGPA10 1 WORKINHS 1		0.0 21549	2. 042	0.0413
SPOUSE 1		0.022841	0.691	0.4896
KID		0. 034 155	-0.811	0.4172
	-9. 046895	6.014823	-3. 164 -0. 0 99	0.00 16 0.9 213
	1 -0.00650084 1 0.079056	0.065 773 0.06 9625	1.135	0. 2563
	1		-1.846	9. 9650
	0.0004294457	0. 055901	0.008	6. 9939
	-0.00778136	0. 075833	-0. 103	9.9183 9.4329
	1 0. 648984 1 6. 90 6827	0. 06 2448 0. 340 193	0. 784 2. 666	0. 6877
	1		-2. 970	0. 0030
	-0. 069224	0.056009	-1.236	9. 2166
PHHSERY	1 -0. 571393		-6. 791	0.000 1 0.3376
	1 -0.133246 1 -0.008596 17		0. 959 0. 836	0. 4934
	1 -0.00859617 1 -0.061544		-0.142	0.8874
	0.004816328	0.014166	0. 340	●. 7339
MOLOCCON	1 0. 138729	6.345649	9. 462	9. 6877 8. 1667
	1 0.008411005		1.383 6.967	9. 1567 9. 9466
	1 0.99 1838362 1 0. 2376 50		8. 977	0.3285
	1 -0. 086210	9.067464	-1.278	0.2014
	1 -0. 014837		-0. 093	0. 9258

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HS&B, MONTHLY EARNINGS

DEP VARIABL	E: LIMITHPAY			
	SUM OF			
	F SQUARES 50 191.725		F VALUE	PROB) F
ERROR 213			18. 827	0. 000 1
C TOTAL 219		4.310033		
ROOT MS	E 0.564530	R-BQUARE	0.220 2	
DEP MER		ADJ R-8Q	0. 1983	
r. v.	9. 146176			
	PARAMETER	STANDARD	T FOR HO:	
VARIABLE D	F ESTIMATE	ERROR	PARAMETER-0	PROB > 'T'
INTERCEP	1 6.476148	0.144978	44.678	0. 900 1
CONC LIMCON	1 9. 164755 1 3. 643689	0.04 1803 0.039333	2.506	0.0123
	1 0.090171	0. 0 42619	1. 1 1 1 2. 1 1 6	0. 2668 0. 0 345
	1 0.235159	0. 174689	1.346	6. 1784
	1 -0.071425	0.046 413	-1.539	0.1240
	1 -0.067313 1 -0.016834	0. 056453	-1.192	6 . 2332
	1 -0.016834 1 0.106604	0.09 3122 0.08359 6	- 8. 181 1. 275	0.8566 8.000/
	1 -0.056768	0.00000	-0.642	0. 2024 0. 5207
	1 -0.370858	6. 126753	-2.926	0.0035
	1 -0.017581	0. 943221	-8. 48 7	0.6842
	1 0. 529959 1 -0. 220380	0.255886	2. 671	0. 0385
	1 0.097414	0.113430 0.021298	-1.943 4.574	0.9 522 0.98 01
	1 6. 166459	8.261996	0.383	0.7014
	1 0.020460	0. 03855 6	0. 531	9.5957
	1 -0.00131723	8. 63 4776	-0. 038	0.9698
	1 0.000 2994922	0.043265 0.043265	1.732 0.5 65	0.0834
MOLMEXP .:		0.116695	-2 . 60 9	0. 5725 0. 0447
	1 0.0006916686	0.0084987515	1,409	0.1589
	0.263625	0.147985	1.792	0.8732
	1 -0.00163902 1 0.184514	0.0020 87758 0. 137560	-8. 498	0.6198
	-0.342228	0.13/366 0.038175	e. 760 -8. 965	0.44 .5 0.00 01
POSTØ :	0.060981	0.044487	1. 373	9.1698
	-9. 115468	e. 350 379	-2. 294	0.0219
	-0. 320748 -0. 323956	0.09184 5	-3.523	0.0004
	-0.052209	0. 040264 0. 096529	-0.595 -0.541	0.5519
	0.045340	9.019210	2. 360	0. 5887 0. 91 <i>8</i> 4
MDWKCOMP 1		e. 4496 0 5	0.776	0.4379
EIGHT 1		9. 029562	0. 104	0.9171
MDEIGHT 1 BPA10 1		0. 05 2261 6. 0 22152	0.975	0. 3297
MDGPA10 1		0.059384	-1.772 0 .624	0.0765 0.5327
WORKINHS 1		9. 036552	2.606	0.0092
SPOUSE 1	0.838314	0.038743	0. 989	9. 3228
KID 1		0.657935	-1.461	0. 1443
URBRURAL 1 PROFTECH 1		0.0 25144 0. 111565	-2.463 -1. 0 50	0. 0139 0. 2939
MGR 1		0. 118 0 99	1.564	6. 1180
SALES 1		0.098360	-2. 177	0.0296
CLERK 1		0.094820	-0.463	0.6438
CRAFT 1 OPERATE 1		0. 128629 8. 1 6 5926	0. 916 1. 38 2	0.3600
FARM 1		6. 577043	2.716	0. 1672 0. 9 067
FARMLAB 1	-0.332278	0. 188869	-1.759	0.0787
SERVICE 1		0. 095004	-2.014	0.0442
PHHSERV 1 MDOCCUP 1		0. 14272 0 0. 235657	-4.849 -8.864	0.0001
SELFEST 1		0.017446	~1.341	0.3878 6.1802
MDSLFEST 1	-1.743059	0. 737163	-2.365	0.0181
LOCOFCON 1	_	0.024028	0.480	0.6316
MDLOCCON 1 ABSENT 1		0. 585 279 0. 0 10313	0.75 1	9.4529
DISCIPPR 1		0. 010313 0. 046548	1.363 -0. 668	0. 1730 0. 5431
MDDISPRB 1		Ø. 412436	2. 250	0. 9245
LAHTRELE 1		0.114434	-0. 374	0.7083
MDLAHTRL 1	0.0095 31815	0. 270331	0. 035	0. 9719

John A.A. Va . . .



NIS, HOURLY EARNINGS

DEP VARIABLE	: LNHRPAY			
	SUM OF	MEAN		
SOURCE DE		SQUARE	F VALUE	PROB) F
MODEL 3		2.377805	18.707	0.0001
ERROR 155		0.127106		
C TOTAL 159		•••		
ROOT MSE		R-SQUARE	0.2960	
DEP MEAN		ADJ R-SQ	0.2802	
C. V.	23. 17941		_	
5				
	PARAMETER	STANDARD	T FOR HO:	
VARIABLE DI		ERROR	PARAMETER=0	PROB > !T!

INTERCEP	0.686826	0.094361	7.279	0.0001
	0.003693384	0.001516616	2. 435	0.0150
	0.076075	0.026173	2.907	0.0037
	0.031298	0.023986	1.305	0.1921
	0.038147	0.029809	3. 292	0.0010
	-0.051055	0.026946	-1.895	0.05 83
	0.098153	0.083122	1. 181	0. 2379
	-0.052305	J. 347317	-1.105	0.269 2
	0.003290249		4.092	0.0001
	0.027985	0.056060	0.499	0.5177
	0.013644	0.015754	0.866	0.3866
	-0.00468242	0.030779	-0.152	0.8791
	0.091462	0.052679	1.736	0.0827
	1 -0.00662901	0.034265	-0.193	0.8466
	0.019471	0.050230	0.388	0.6983
	1 -0.00440059	0.030384	-0.145	0.8849
	0.003609043	0.076877	0.047	0. 9626
	0.008312685	0.036390	0.228	0.8193
	0.017081	0.031217	0.547	0.5843
	0.046272	ø . 05336 2	0.867	0.3860
		0.040798	1.789	0.0739
	1	0.0001199754	8.069	0.0001
	1 0.0009880824	0.00230469	7.783	0.0001
	1 0.002089234		2.345	0.0192
		0.002415111	1.153	0. 2492
	1	0.059909	-0.195	0.8454
		0. 037032	1.616	0.1063
		0. 037552	-0.544	0. 5866
		0.040497	0. 9 5 6	0. 3390
		0.072218	1.144	0. 2527
	•	0.072218 0.034310	6.580	0.0001
		0.034310 0.038821	-1.440	0.1502
		0. 036621 0. 046667	-2.047	0.0408
	1 -0.095517 1 -0.037697	0. 040557 0. 047557	-0. 79 3	0. 4281
	_	0.047557 0.050780	-2.212	0.0271
	1 -0.112310		3.003	0.0 271
POSTGTE4	1 0. 194115	0. 054 6 34	3. 66 3	Ø. 6 627



NLS, MONTHLY EARNINGS

DEP VARIABLE:	LNMTHPAY			
	SUM OF	MEAN		
SOURCE DF	SQUARES	SQUARE	F VALUE	PROB) F
MODEL 34	245.760	7.228248	23. 731	0.0001
ERROR 1558	474.543	0.304585		
C TOTAL 1592	720.304			
ROOT MSE	0.551892	R-SQUARE	0.3412	
DEP MEAN	6.436890	ADJ R-8Q	0. 3268	
C. V.	8. 573893			
	PARAMETER	STANDARD	T FOR HØ:	
VARIABLE DF	ESTIMATE	ERROR	PARAMETER=0	PROB > !T!
			,	
INTERCEP 1	5.265532	0. 142536	36.942	0.0001
SES 1	0.002056872	0.002347131	0. 876	0.3810
NEAST 1	0.114144	Ø. 040504	2.818	0.0049
SOUTH 1	0. 142299	0.036950	3.851	0.0001
WEST 1	0. 197938	0.046033	4.300	0.0001
RURAL 1	-0.078339	0.041709	-1.879	0.0605
MDRURAL 1	0. 072330	0. 128669	0. 562	0. 5741
ENG 1	-0.023759	0. 073244	-0.32 4	0. 7457
AFQT 1	0.00529302	0.001243233	4.257	0.0001
MDAFQT 1	0.036047	0.086781	0. 415	0. 6779
GPA10 1	0.001930018	. 0. 024386	0.079	0. 9369
MDGPA10 1	-0. 030898	0.047642	-0.649	0. 5167
CONTR 1	0. 151021	0. 081530	1.852	0. 0642
CONC 1	0.016516	0.0530 39	Ø. 311	0.7555
LIMCONTR 1	0. 127097	0. 077685	1.636	0.1020
LIMCON 1	0.012561	0.047034	0. 267	0. 7895
CONEXPTR 1	0.011836	0.119006	0.099	0.9208
CONEXP 1	0. 042131	0.056323	0.748	0.4546
ACAD 1	0. Ø64267	0.048300	1.331	0.1835
SRVOC 1	0.081810	0.082604	0.990	0.3221
SRACAD 1	0. 143588	0.063125	2.275	0.0231
LMEXP 1		0.0001844375	8.617	0.0001
TENURE 1	0.026925	0.003553181	7.578	0.0001
SESTEEM 1	0.00578388 1	0.003736331	1.548	0.1218
MDESTEEM 1	-0.173742	0.092612	-1.876	0.0608
NEPOSTØ 1	0.093415	Ø. 057321	1.630	0.1034
NEPOST1 1	-0.019165	Ø. 058129	-0.330	0.7417
NEPOST2 1	0.027231	0.062689	0.434	0.6641
NEPOST3 1	0.103101	0.111791	0.922	0. 3565
NEPOST4M 1	0.227776	0.053111	4.289	0.0001
POSTØ 1	-0.460824	0.058846	-7.831	0.0001
POST1 1	-0.514207	0.071012	-7.241 -422	Ø. ØØØ1
POST2 1	-0.393707	0.072798	-5.408	0.0001
POST3 1	-0.612248	0.076961	-7 . 9 5 5	0.0001
POSTGTE4 1	0.0 27288	ø. ø99922	0.273	0. 7848



HS&B, HOURLY EARNINGS

DEP VARIA	BLE	LNHRPAY			
		SUM OF	MEAN		
SOURCE	DF	SQUARES		F VALUE	PROB) F
MODEL	58	30. 626 1 0 6	0.528036	3. 848	0.0001
,	471	201, 834	0. 1372 0 9		
C TOTAL 1		232, 460			
ROOT I		0.370417	R-SOUARE	0. 1317	
DEP M	EAN	1.528545 24.2333	ADJ R-80	0. 9 975	
L. V.		24, 2333			
		PARAMETER	STANDARD	T FOR HO:	
VAR7ABLE	DF	ESTIMATE	ERROR	PARAMETER-0	PROB > 'T!
INTERCEP	1	1.438254	8. 09 4429	15. 231	8.98 31
CONC	1	-0.033008	0.036665	-0.900	0. 3681
LIMCON	1	-0.017862	0. 030366	-0. 588	0.5565
CONEXP	1	0. 010673 -0. 1926 0 5	0. 039486	0. 270 −1. 584	0.7869
MDTRANS ACAD	1	-0.028219	0. 121571 0. 03648 8	-1.564 -0.772	0.1133 0.4394
SRVOC	i	0. 138413	6.043881	3. 160	0.96 16
SRACAD	ī	0.018836	0.075055	0. 251	0.8019
CONTR	1	0.139417	0.046986	3. 025	0.0025
LIMCONTR	1	0. 178731	0.04268 8	4. 187	0.0001
CONEXPTR	1	0.131308	0. 0 61246	2. 144	0. 63 22
HCAP	1	-0.070980	0.030207	-2.350	0.0189
ENG2LANG	1	0. 2619 0 6	6. 155113	1.688	0.0915
MDENSLAN SES	1	0.195067 0.062544	0.079841	1.329 3.9 6 5	6. 1846
EAST	1	0. 013849	9. 016017 9. 030 176	0. 459	0. 00 01 0. 646 3
SOUTH	i	0.015549	0.026748	1.369	0. 1739
WEST	1	0.064758	0.033685	1.922	0.0547
LMEXP	1	0.001374287	6.00040349	3.406	0.0007
MDLMEXP	1	-0.143734	0. 087980	-1.634	0. 1025
TENURE		-0.000462826	6.800 3745517	-1.236	0. 2168
MDTENURE	1	0. 193744	0.119309	1.624	6. 1046
TEST	1	-0.00184989	8. 00 1534751	-1.205	0.2283
MDTEST ENROLL	1	0.064531	0.081941 0.0322 77	0. 796	9.4269
POSTØ	i	-0.047883 0.040375	0.033842	-1.484 1.222	0. 1 38 2 0. 2219
POST1	ī	0.068459	0.039233	1.745	0.0212
POST2	1	0.048723	0.086411	0.564	0.5729
INDETER	1	e. 0 37360	0.035996	1.038	0. 2995
MDPOST	1	0. 124271	0.0 76710	1.620	0. 1054
MCRKCOMP	1	0. 013235	0.015421	0.858	0. 3909
MDWKCOMP	1	-0.083369	0.172866	-0. 482	0. 6297
EIGHT MDEIGHT	1	-0.00262392 0.003132 0 96	0.023841	-0.110 0.096	0.9124
GPA10	i	0.00513586	9. 032670 9. 016844	0. 327	0. 9236 0. 7435
MDGPA10	ī	0.045194	9. 945687	0.989	6. 322 7
HORKINHS	1	0. 037267	0.038144	9.977	0.3287
SPOUSE	1	0.088652	0. 844792	1.979	0.0480
KID	1	0.0480 38	0.0 63221	9. 768	0. 4475
URBRURAL	1	0.020695	9.019963	1.837	0.3001
PROFTECH MGR	1	-0.021964	9. 0509 97	-0. 431	O. 6668
MGR SALES	1	0.031895 -0.029708	0.059430 6.0471 0 3	0.537	6. 59 ₁₆
CLERK	i	-0. 059700 -0. 068466	0.04/103	-0.631 -1.596	0. 5263 0. 1271
CRAFT	ī	-0.065151	0.030782	-2.117	0.0345
OPERATE	1	0.619787	0.032366	0.611	0.5411
FARM	1	0. 354963	0.2649 0 4	1.340	0.1804
FARMLAB	1	-0. 338676	0. 954854	-6. 174	0. 0001
SERVICE	1	-0.136128	0.033456	-4.869	0.0001
MDOCCUP	1	0.149179	9. 143581	1.039	9.2990
SELFEST MDSLFEST	1	-0.00211529 -0.431327	0.014648 0.32 0 449	-0. 144 -1. 746	0.8852
LOCOFCON	i	-0. 00500545	9. 6 16921	-1.346 - 0.296	0. 1785 0. 7674
MDLOCCON	ī	0.364024	0.281907	1.291	0. 1968
ABSENT	1	0.015396	0.007894899	1.950	6. 0514
DISCIPPR	1	-0.040593	0. 6 2735A	-1.484	0. 1381
MDDISPRB	1	-0.144665	0.155213	-0. 932	0. 3515
LANTRBLE MDLANTRL	1	0.074916	0.039689	1.688	0. 6593
HULPHI I KL		0.056474	6. 151037	8. 374	6. 7985



HS&B, MONTHLY EARNINGS

DEP VAR	IABLE:	LNMTHPAY			
		SUM OF			
SOURCE MODEL	DF	SQUARES		F VALUE	PROB) F
ERROR	58 1471	39. 898265		4.288	6. 8001
C TOTAL		235. 998 275. 896			
	MSE	0.400542		0.1446	
	MEAN	6.731085		0.1109	
c. v.		5. 950624		0.1102	
VARIABLE	- 20-	PARAMETER	STANDARD	T FOR HO:	
VHKIHBLE	DF	ESTIMATE	ERROR	PA AMETER-0	PROB) 'T'
INTERCEP	1	6. 607820	9.102198	EA 714	
CONC	1	-0.039878	0.039647	64.714 -1.006	0.0001
LIMCON	1	-0. 619153	0.032836	-0.583	0.3147 0. 5598
CONEXP	1	-0.019693	0.042691	-0.461	9. 6447
MDTRANS ACAD	1	-0. 193254	0. 131458	-1.470	B. 1418
SRVOC	1	-0.040413	0.039455	-1.024	0.3059
SRACAD	i	6.112612 6.963438	0.047363 0.08 1159	2.378	● • 0 176
CONTR	ī	0.095142	6. 049834	0.782 1.909	0.4345
LIMCONTR	1	0.136741	0.046160	2.962	9.0 564 0.0 031
CONEXPTR	_	0.107473	0.066227	1.623	0. 1048
HCAP	1	-0.060230	0.032663	-1.844	0. 0654
ENG2LANG MDEN2LAN	_	0. 3748	6. 167728	2.235	0.0256
SES	i	0. 1 0 28.	0.085479	1.203	0.2290
EAST	i	0.0767 ² 0.022895	0. 017320 0. 032630	4.065	0.0001
SOUTH	1	0.030361	0. 028923	0.702 1.050	0.4830
WEST	1	0. 038147	0.036425	1.047	0. 2940 0. 2951
LMEXP		0.001182889	0.0004363043	2.711	0. 0068
MDLMEXP	1	-0. 117157	0.095 136	-1.231	0.2183
TENURE MDTENURE			0.0004050125	-0. 714	0.4751
TEST	1	0.119191 -0.00177721	0.129011	0.924	9. 3557
MDTEST	i	0.142938	0.001659567 0.087632	-1.071	0.2844
ENROLL	1	-0.119045	6.034902	1.631 ~3.411	8. 1031
POST O	1	0. 025762	9.035730	0.721	0.0007 0.4710
POST1	1	0. 050 598	9. 8 42423	1.193	0. 2332
POST2 INDETER	1	0.079022	0.093438	0.846	0.3979
MDPOST	1	0.016252	0. 038924	G. 41E	0. 6764
WORKCOMP	i	0.074442 0.011517	0.082948 0.016675	0. 897	0. 3696
MDWKCOMP	ī	-0.055864	0. 186918	8 . 691 -8 . 299	0. 4899
EIGHT	1 .	-0.00267826	0.025780	-0. 184	0.7651 0. 9173
MDEIGHT		0.008186754	0.035327	0. 232	0. 8 168
GPA10	1	0.015870	0.0 1 8 213	8. 871	6. 3837
MDGPA10 WORKINHS	1	0.032621	0.049403	9. 660	0.5092
SPOUSE	i	0.070046 0.077452	0.041246	1.698	0. 889 7
KID	ī	0.092502	0. 048434 €. 068363	1.599 1.353	0.1100
URBRURAL	1 (0.00758572£	0.021587	6. 351	6. 1762 9. 7253
PROFTECH	1	-0.015163	0.055145	-0. 275	0. 7834
MGR	1	0.099 223	0. 864264	1.544	0. 1228
SALES	1	-0.047982	0.050934	-0. 942	0.3463
CLERK CRAFT	1	-0.113476	0.048500	-2.340	0.0194
OPERATE	i	6. 011318 0. 032130	0. 033286 0. 034999	0. 346 0. 918	6. 7339
FARM	i	0. 467535	0. 286448	1.632	0. 3587 0 . 1 0 29
FARMLAB	1	-0. 186893	0.059315	-3. 151	0. 00 17
SERVICE	1	-0. 201563	0.036177	-5. 572	9. 6001
MDOCCUP	1	9. 151301	9. 155258	0. 975	0.3300
SELFEST MDSLFEST	1 -	-0. 00 523929	0.015840	- 6. 331	0.7409
LOCOFCON		-0.418965 0.003554015	0. 346310 0. 018297	~1.209	0. 2268
MDLOCCON	i `	0. 201342	0.304834	0. 194 0. 660	0. 8460 0. 5098
ABSENT	ī	0.020672	0.008536961	2.421	0.0156
DISCIPPR	1	~0. 039294	0.029503	-1.328	0. 1843
MDDISPRB	1	~0.0055997	●• 167836	-0.033	0. 9734
LAWTRBLE	1	0.091040	0.042917	2. 121	0. 03 41
MDLAHTRL	1	0 . 124939	•· 16332 0	9. 765	8. 4444

BEST COPY AVAILABLE





NLS, HOURLY EARNINGS

DEP VAR	IABLE	: LNHRPAY			
		SUM OF	MEAN		
SOURCE	DF	SQUARES		F VALUE	5505/5
MODEL	35	61.024511		9. 485	PROB) F
ERROR	1105	203.133		2. 403	0.0001
C TOTAL	1140	264.158	-		
ROOT	MSE	Ø. 428755		0.2310	
DEP	MEAN	1.777744			
C.V.		24. 11792		0. 2067	
			•		
		PARAMETER	STANDARD	T FOR HØ:	
VARIABLE	DF	ESTIMATE		PARAMETER=Ø	
		= : = :	CKKOK	PHICHEL CK-6	PROB > !T!
INTERCEP	1	1.128181	0. 151432	7. 450	
SES	1	0.005337761		7. 439 2. 491	0.0001
NEAST	1	0.089494			0.0129
SOUTH	1	0.073991	0.034034	2. 4 0 5	0.0163
WEST	1	0.132860		2. 174	0.0299
RURAL	1	-0.085159		3. 365	0.0008
MDRURAL	1	0.014162		-2. 254	0.0244
ENG	1	0.117877		8. 121	. 0. 9039
AFQT	1	0.00149497		1. 334	0. 1826
MDAFQT	ī	0. 129783	0.001044143	1.432	0. 1525
GPA10	ī	0.009112342	0.066001	1.966	0.0495
MDGPA10	ī	0.005112342	0.021918	0.416	0. 6777
CONTR	i	0.081907	0.046655	0. 141	0.8 882
CONC	ī	0.017086	0.060479	1.354	0. 1759
LIMCONTR	ī	0.033408	0.064464	0. 265	0.7910
LIMCON	1	-0.031200	0.067097	0. 498	0.6186
CONEXPTR	ī	-0. 101626	0.045479	-0. 686	0. 4928
CONEXP	1		0.092870	-1.094	0.2741
ACAD	i	0.011365	0.065695	0. 173	Ø. 8627
SRVOC	1	0.018034	0.042790	0. 421	0.6735
SRACAD	1	0.007395939	0.076029	0. 097	0. 9225
LMEXP	1	0.098876	0.062272	1.588	0. 1 126
TENURE	1	0.001593423	0.0001584684	1 0. 05 5	0.0001
HOURS	1	0.011790	0.002973377	3. 965	0.0001
SESTEEM		-0.00516108	0.001656097	-3. 116	0.0019
MDESTEEM	1	0.006727015	0.003562236	1.888	0.0592
NEPOSTØ	1	-0.024743	0.085 889	-0. 288	0.7733
NEPOST1	1	0.041633	0.048724	0. 854	0.3930
NEPOST2	.1	0.074108	0.055 392	1.338	0.1812
NEPOST3	1	0.023391	0.059049	0. 396	0.6921
NEPOST4M	1	-0.039616	0. 1 20 192	-0.330	0.7418
POSTO	1	0.099764	0.047789	2. Ø88	0.0371
POST1	1	-0.101980	0.066089	-1.543	0.1231
POST2	1	-0.069343	0. 074558	-0.930	0. 3525
POST3	1	-0. 088457	0. 076590	-1.155	0.2484
POSTGTE4	1	-0.103509	0.081935	-1.263	0.2067
-USIGIE4	1	0. 185064	0. 088705	2 . 0 86	0.0372



NLS, MONTHLY EARNINGS

DEP VARI	ABLE	LNMTHPAY			
		SUM OF	MEAN		
SOURCE	DF	SQUARES		E HALLE	
MODEL	34	64.136630		F VALUE	PROB) F
ERROR	1106	218.740		9. 538	0.0001
C TOTAL	1140	282.877			
	MSE	0.444720		0.0007	
DEP	MEAN	6.992168	•••	0. 2267	
C. V.		6. 360261	,	0. 2030	
		== 200000			
		PARAMETER	STANDARD	T FOR HØ:	
VARIABLE	DF	ESTIMATE		PARAMETER=0	. DDCD \
			ENNON	LUKHIJE I EK=0	PROB > !T!
INTERCEP	1	6.109865	0. 138662	44.063	0.0004
SES	1	0.005876213		2.645	0.0001
NEAST	1	0.056771	0.038423	1.478	0.0083
SOUTH	1	0.059864	0.035261	1.698	0.1398
WEST	1	0.110503		2. 7 0 3	0.0898
RURAL	1	-0.074573		-1.904	0.0070
MDRURAL	1	-0.00372754	0. 121618	-0.031	0.0572
ENG	1	0.104031	0.091659	1. 135	0. 9756
AFQT	1	0.001431152	0.001082895	1.322	0. 2566
MDAFQT	1	0.124117	0.068450	1.813	0.1866
GPA10	1	0.007240554	0.022733	0.319	0.0701
MDGPA10	1	0.028758	0.048334	0.595	0.750 2
CONTR	1	Ø. 117896	0.062619	1.883	0. 5520
CONC	1	0.027833	0.066846	0. 416	Ø. 0600
LIMCONTR	1	0.053862	0.069565	0. 774	0. 6772
LIMCON	1	-0.023398	0.047166	-0. 496	0.4389
CONEXPTR	1	-0.095452	0.096321	-0.991	0.6199
CONEXP	1	0.031025	0.068110	0. 456	0.3219
ACAD	1	0.017597	0.044383	0. 396	0. 6488
SRVOC	1	-0.00369391	0.078856	-0.047	0. 6918
SRACAD	1	0.083645	0.064570	1.295	0.9626
LMEXP	1	0.001660157	0.0001642505	10. 107	Ø. 1954
TENURE	1	0.010983	0.003082064	3.564	0.0001
SESTEEM	1	0.007352934	0.003694151	1.990	0.0004 0.0450
MDESTEEM	1	-0.016996	0.089087	-0.191	0.0468
NEPOSTØ	1	0.035999	0.050531	0.712	0.8487 0.4764
NEPOST1	1	0. 093853	0.057403	1.635	0.4764 0.1023
NEPOST2	1	0. 028937	0.061244	0. 472	
NEPOST3	1	-0 . 0555 56	0.124650	-0.446	0.6367
NEPOST4M	1	0. 112584	0.049535	2.273	0.6559
PCST 0	1	-0.138936	0.068451	-2.030	0.0232
POST1	1	-0.103678	0.077265	-1.342	0.0426
POST2	1	-0.114570	0.079394	-1.443	Ø. 1799
PJST3	1	-0.104793	0.084981	-1.233	0.1493
POSTGTE4	1	0. 222829	0.091905	2.425	0.2178
				L. TEJ	0.0155



HS&B, HOURLY EARNINGS

DEP VARIABLE	: LNHRPAY			
	SUM OF	MEAN		9999\F
SOURCE DF	SQUARES	SQUARE	F VALUE	PROB)F 0.000 1
MODEL 59		0.624293	4. 528	0.0001
ERROR 1971	271.773	Ø. 137886		
C TOTAL 2030		R-SQUARE	0.1194	
SEM TOOR		ADJ R-SQ	0.0930	
DEP MEAN	1.507124 24.63833	HD3 11-04	0.000	
c. v.	£4. 03033			
	PARAMETER	STANDARD	T FOR HO:	
VARIABLE DF	•	ERROR	PARAMETER=0	PROB > 'T'
VAN. 1. ADEC 5.				
INTERCEP 1	1.480245	0.082271	17. 992	0. 9901
CONC 1		0.033043	-0 . 701	0.4834
LIMCON 1	-0. 01 05 87	0. ,8257 9 7	-0.412	9, 6885
CONEXP 1		0.033673	-0. 284	0. 7761 0. 7695
MDTRANS 1		6. 103247	-0. 898	e. 3695 e. 3882
ACPD 1		0.029739	-9.863	6. 99 13
SRVOC 1		0.039152	3. 225 8. 763	8. 4456
SRACAD 1		0.059430	3. 088	0. 0020
CONTR 1		0. 042685 0. 040114	3. 984	0. 0001
LIMCONTR 1		0.059274	1.884	a. e596
CONEXPTR 1		0.026408	-2. 271	0. 6233
HCAP 1 ENG2LANG 1		0.143480	2. 048	0.0487
MDENSLAN 1	' . ::T::::::	0.067116	0.412	0. 6807
SES 1		0.013675	4. 88 1	8. 866 1
MDSES 1		0.168023	-0. 953	0.3495
EAST 1		6.026470	8. 346	6. 7292
SOUTH 1		0.023499	1.824	6, 6683
WEST 1	0. 101649	0. 0295 65	3. 438	0. 0006
LMEXP 1	0.00109571	0.0003556158	3. 661	0.00 21
MDLMEXP 1	-0. 157773	0.071012	-2. 222	0. 6264 0. 5453
TENURE 1		0.0003305494	-0.605	6. 0347
MDTENURE 1		ə. 094085 9. 001363365	£. 113 -1. 9 37	6. 3800
TEST		0.067127	6. 216	e. 8892
	-	0.027483	-1.488	0, 1593
ENROLL 1		0.030283	0. 934	0. 3502
	P. 025504	0.034159	Ð. 747	0. 4554
	-0.022732	8.0 69191	-0. 329	9.7425
INDETER	0.019459	0.032077	8. 687	0.5442
MDPOST,	6. 099110	0.066595	1.488	0. 1369
	0.020172	0.013153	1.534 -1.424	6. 1253 6. 1545
	-0. 201527	Ø. 141482 Ø. 020752	-0. 537	e. 5911
	1 -0.011151 1 0.0 216 0 5	0.029318	6. 737	9.4612
	1	0.014567	-0.481	0.6388
•	6.011384	6.039750	6. 286	0.7746
	0.021776	0.031327	9, 695	8.4871
	0.682677	0.042717	1.935	6. 05 31
	1 0.068200		1. 133	9. 2575
URBRURAL	1 <i>-</i> 0.00619596		-0. 359	9.7195
	1 -0.026453		-9.631 -0.011	0.5281 0.9913
	1 -0.000589677		-1. 479	6 . 1394
	1 -0.055606		-2. 479	0.0133
	1 -0.067001 1 -0.060154		-2.140	0. 0325
	1 -0.060154 1 0.028607		6. 994	6. 3204
	1 0.108299		8. 499	0.618 0
	1 -0. 291581		-5.672	0.00 01
	1 -0.145195	0.827519	-5. 276	6. 6691
MDOCCUP	1 0.066531	0.114927	0. 579	9. 5 627
BELFEBT	1 -0.00146004	0.012743	-0. 115	0.9088
MDSLFEST	1 -0. 263438		-0. 658	9. 3912 9. 5602
LOCOFCON	1 0.008686381		8.5 63	9. 26 9 0
	1 0.311798		2.261	0. 6239
ABBENT	1 0.015722		-0. 341	e. 7329
DISCIPPR	1 -0.00841589 1 -0.100546		-0.778	0. 4365
MDDISPRB LAWTRBLE	1 -0.190548 1 0.044375		1,244	9. 2138
MDLAWTRL	1 -0.00746946		-0. 959	0.9 527_
				-



HS&B, MONTHLY E. RMINGS

DEP VARIA	ABLE	: LNMTHPAY			
		SUM OF			
SOURCE	DF	SQUARES		F VALUE	PROB) F
MODEL ERROR 1	59 1971	166.212		9. 601	0.0001
C TOTAL S		578. 343 744. 555			
ROOT		0.541688	R-SQUARE	0. 2232	
DEP N		6. 580734	ADJ R-80	6. 2000	
C. V.		8. 332723	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0. 2000	
		PARAMETER	STANDARD	T FOR HO:	
VARIABLE	DF	ESTIMATE	ERROR	PARAMETER=0	PROB > 'T'
INTERCEP	1	6. 637495	9.120016	55. 305	7. 00°
CONC LIMCON	1	0.022633	0.048203	0. 470	0.63
CONEXP	i	-0.030943 -0.010202	0. d3 500 0. 049121	-0. 825 -0. 208	0. 4°
HOTRANS	i	-0. 034059	0. 150615	-0. 226	0. 8 3. £
ACAD	1	-0.021158	0.043383	-0. 488	Ø. c
SRVOC	1	0.170199	8. 057114	2. 987	Ø. 30L)
SRACAD	1	0.036431	0.086695	0.9 97	0.3189
CONTR	1	6. 059915	0.0 62268	0. 962	6. 336 1
LIMCONTR	1	0. 183949	9.058517	3. 143	0.00 17
CONEXPTR	1	0. 228207	0.086 468	2. 639	0.0984
HCAP ENG2LANG	1	-0.045502 0.539171	0.038523	-1. 181	0.2377
MDENSLAN	i	-0.054614	0.209306 0.097907	2. 576 -0. 538	0.6101
SES	i	0.088382	0.019949	4. /,38	0. 5779 0. 9001
MDSES	ī	-0.041050	0.245109	-9 167	8. 8679
EAST	4 '	-0.00356701	0.038613	· J. 99 2	0. 9264
SOUTH	1	0.031884	0.034280	0. 930	0.3524
WEST	1	0. 072324	0.043129	1.677	0. 0937
LMEXP			0.000 5187644	0.718	0.4777
MDLMEXP	1	-0.217179	0. 103591	-2. 097	0.0362
TENURE MDTENURE	1	. 00002356099		0. 849	8.9618
TEST	1	0.037066 -0.00114364	0.137249 0.001988846	0. 27 6	0. 7871
MDTEST	i	0.004450833	6. 097923	-9. 575 9. 045	0. 5653 0. 9638
ENROLL	ī	-0.247602	0.040091	- 5, 176	0. 9 001
POSTO	1	-0.00623781	8. 044177	-6, 141	0. 8877
POST 1	٠	-0.084864	9. 049830	-1.703	P. 6887
POST2	•	-0.079634	0.100934	-0. 789	6.438 2
INDETER	1	-0.063374	0. 046793	-1.354	0.1758
MDPOST WORKCOMP	1	6. 025528	0.097149	0. 263	6. 792 8
MDWKCOMP	1	0.030851 -0.287564	0.019188 0.206390	1.608	0. 1080
EIGHT	i	-0.019982	0. 930272	-1.393 -0.660	9. 1637 9. 50 93
MDEIGHT	1	0.046642	0.042768	1.091	0. 2756
GPA10	1	-0.025602		-1.205	0. 2284
MDGPA10	1	-0.027724	0.057986	-0.478	0.6323
WURKINHS	1	0.083 633	0. 045699	1.830	0. 0 674
SPOUSE	1	0.107288	0.062315	1. 722	0 0853
KID	1	0.109348	0.087836	1.245	0.2133
URBRURAL PROFTECH	1	-0.011230 -0.13 634	0.025162 0.061156	-0. 446 -0. 201	9. 6554
MGR	1	9. 119669	0.061156 0.079177	-2. 2 0 1 1. 511	0.6278 0.1388
SALES	ī	-0.124125	0.054862	-2. 263	0. 6238
CLERK	1	-0. 275577	0.051198	-5. 363	6.0001
CRAFT	1	0. 9 67329	9. 841 88 2	1.642	0. 1007
OPERATE	1	0.067425	0 . 0 41 98 6	1.686	0. 1 6 85
FARM	1	0.050872	0.316707	0. 161	0.8724
FARMLAB SERVICE	1	-0. 044691 -0. 279086	6. <i>6</i> 74991 0. 0 40144	-0. 596	6. 5513
MDOCCUP	i	0.094785	0. 1676 5 3	-6. 952 0. 565	8. 6 001 8. 5719
SELFEST	i	-0.00263169	0. 16/653 0. 01 858 9	-0. 142	0.5/19 0.68,`
MDSLFEST	i	-0. 536611	0.448053	-1. 198	9. 2312
LOCOFCON	1	0.019694	0.021746	0. 906	0. 3652
MDLOCCON	1	0.463499	0.403679	1.148	0. 251 1
ABSELLT	1	0.020503	0.010144	2. 021	0.0434
DISCIPPR	1	0.005671837	0.035971	6. 158	8.8747
MDDISPRB	1	-0.00327166	0.188483	-0.017	0.9862
LAWTRBLE MD: AWTRL	1	0.062015	0.052050	1. 191	0. 2336
esta sem (MT	1	0. 0 68897	0. 183660	s. 375	0. 7076



NLS, HOURLY EARNINGS

DEP VAR	ABLE:	LNHRPAY			
		SUM OF	MEAN		
SOURCE	DF	SQUARES		F VPLUE	PROB) F
MODEL	35	88.397629	2.525647	14.056	0.0001
ERROR	1460	262.338	0.179684	- 11 000	0.000
C TOTAL	1495	350.736			
ROOT	MSE	0.423891	R-SQUARE	0.2520	
	MEAN	1.703844		0.2341	
C.V.		24.87853			
		PARAMETER	STANDARD	T FOR HO:	
VARIABLE	DF	ESTIMATE	ERROR	PARAMETER=3	PROB > !T!
INTERCEP	_	0.831356		6.952	0.0001
SES	1	0. 004734568	-	2 . 6 21	0.0089
NEAST	1	0.095630		3.012	0.0026
SOUTH	1	0.076207		2.603	0.0093
WEST	1	0.147357	0.0338 16	4.358	0.0001
RURAL	1	-0.060610	0. 032579	-1.860	0.0630
MDRURAL	1	0.037774	0.108149	0. 349	0.7269
ENG	1	0.159904	0. 072989	2. 191	0.0 286
AFQT	1		0.0009157412	1.990	0.0468
MDAFQT	1	0.134489	0. 05 9739	2.251	0.0245
GPA10	1	-0.012066	0.018620	-0. 648	0.5171
MDGPA10	1	0.029596	0. 040653	0.728	0.4667
CONTR	1	0. 105956	0. 057634	1.838	0.0 662
CONC	1	0.040618	0 . 055655	0. 730	0.4656
LIMCONTR	_	0.073986	0. 060858	1.216	0.2243
LIMCON	1	-0.040556	0. 039582	-1.025	0. 3057
CONEXPTR	_	-0.069834	0.091184	-0. 766	0.4439
CONEXP	1	0.039809	0.055304	0.720	0. 4718
ACF.	1	0.049953	0.034963	1.429	0.1533
SRVOC	1	-0.016980	0.066388	-0. 256	0. 7982
SRACAD	1	0.029421	0.05 1267	0. 574	0. 566 1
LMEXP	1	0.0016048		11.226	0.0001
TENURE	1	0.011330	0.002549841	4.443	0.0001
HOURS	1	0.002255026	0.9009777527	2. 306	0.0212
SESTEEM	1	0.005695438	0.00304041	1.873	0.0 612
MDES /EEM	1	-0.030897	9. 076384	-J. 405	0. 6859
NEPOSTØ	1	0.067938	0.044943	1.512	0. 1 308
NEPOST1	1	0.062518	0.050047	1. 249	0. 2118
NEPOST2	1	0.048125	0.054945	0. 876	0.3 812
NEPOCTA	1	-0.086933	0.110382	-0. 788	0. 4311
NEPOSTAM	1	0. 123476	0. 043452	2.842	0.0046
POSTØ	1	-0. 089566	0.0480£6	-1.863	0.0626
PCST1	1	-0.075146	0.052252	-1.438	0.1506
POST3	1	-0.119780	0. 054753	-2. 188	ø. 0289
	1	-0.110789	0.059598	-1.859	0. 0632
POSTGTE4	1	0.118298	0.0 66735	1.773	0. 0765
			187		

ERIC

LANGE VALLE

NLS, MONTHLY EARNINGS

DEP VARIABLE	: LNMTHPAY			
	SUM OF	MEAN		
SOURCE DF	SQUARES		F VALUE	PROB>F
MODEL 34	249.631	7. 342092	20.013	9.0001
ERROR 1461	535.999			0.000
C TOTAL 1495	785.630			
ROOT MSE	0.605699		0.3177	
DEP MEAN	6.715739		0.3019	
C. V.	9. 019096		0.5013	
Q1 7	3.013030			
	PARAMETER	STANDARD	T FOR HO:	-
VARIABLE DF	ESTIMATE		PARAMETER=0	PROB > !T!
***************************************		LAMON	PHINAME IEN-O	PROD / . I.
INTERCEP 1	5. 830211	0. 163996	35. 551	0.0001
SES 1	0.005741081	0.002580231	2. 225	0.0262
NEAST 1	0.067510	0.045308	1.490	0.1364
SOUTH 1	0.115662		2.766	0.0058
WEST 1	0. 164701	0. 648318	3.409	0.0007
RURAL 1	-0.124764	0.046527	-2.682	0.0074
MDRURAL 1	0.167640	0.154500	1.085	0.2781
ENG 1	-0.049869	0. 104153	-0.479	0.6322
AFQT 1	0.003154265		2.412	0.0160
MDAFQT 1	0. 163773	0.085361	1.919	0.0552
GPA10 1	-0.040742	0.0 26 5 96	-1.532	0. 1258
MDGPA10 1	0.088237	0.058028	1.521	0. 1286
CONTR 1	0. 239641	0.082139	2. 918	
CONC 1	0.021973	0.079525		0.003 6
LIMCONTR 1	0. 021973 0. 103926	0.086939	0. 276	0. 7824
LIMCON 1	-0. 054853		1.195	0. 2321
CONEXPTR 1		0.056558	-0.970	0. 3323
	0.076142	0. 130161	0.585	0.5 586
	0.071214	0.079016	0.901	0.3676
	0.018372	0.049939	0. 368	0.7130
SRVOC 1	-0.103742	0.094790	-1.094	0.2739
SRACAD 1	-0.074164	0.073161	-1.014	0.3109
LMEXP 1		0.0002022546	11.631	0.0001
TENURE 1	0.013507	0.003643237	3.707	0.0002
SESTEEM 1	0.006092576	0.004344242	1.402	0.1610
MDESTEEM 1	0.009763731	0.109143	0.089	0. 9287
NEPOSTO 1	0.047818	0.064210	0.745	0. 4566
NEPOST1 1	0.074115	0.071510	1.036	0.300 2
NEPOST2 1	0.063580	0.078508	9.810	0. 4182
NEPOST3 1	-0.148664	0.157703	-0. 943	0. 346 0
NEPOSTAM 1	0.145169	0.062075	2.339	0. 0195
POSTO 1	-0.457320	0.067422	-6.783	0.0001
POST1 1	-0.497149	0.073159	-6.795	0.0001
POST2 1	-0. 5 31 <i>0</i> 11	0. 076880	-6.907	0.0001
POST3 1	-0. 441 158	0.08435 3	-5.230	0.0001
POSTGTE4 1	-0. 115849	0. 09 5000	-1.219	0.2229





HS&B, HOURLY EARNINGS

		nsan, no	OKLI EAK	111/02	
DEP VARI	ABLE	LNHRPAY			
SOURCE		SUM OF			
MODEL	DF 68	80UARES 35. 379336		F VALUE 3.912	PROB) F 0.000 1
	1594	212. 962		3. 716	U. 000 1
C TOTAL		247. 361			
ROOT		0. 364692		0.1430	
DEP I	4EAN	1.426823	ADJ R-8Q	0. 1065	
c. v.		25. 57403			
		PARAMETER	STANDARD	T FOR HO:	
VARIABLE	DF	ESTIMATE		PARAMETER=0	PROB > !T'
INTERCEP	1	1.319831	8.09 2971	14. 138	0.00 01
CONC LIMCON	1	0.031019	0. 0 30740 0. 027797	1.009	9.3131
CONEXP	i	9.018516 9.00 4181277	0.027797 0.032736	9. 666 9. 128	0. 5054 0. 8984
MDTRANS	i	-0.275414	0. 032735 0. 119904	-2. 297	0.0218
ACAD	1	-0. 05a167	0. 046368	-1.470	0.1417
SRVOC	1	v. 058606	0. 0 376 0 8	1.558	0. 1194
SRACAD CONTR	1	0.124258	0.080537	1.543	8 . 1231
LIMCONTR	1	0. 133913 0. 132345	8. 84629 7 8. 84942 8	2. 892 2. 678	0.0039 0.0075
CONEXPTR	i	0. 132343	6. 873874	1, 075	0.2824
HISPM	1	0.945117	0.833424	1.350	0. 1773
NATM	1	0.054901	0. 07 0 7 0 8	6. 776	0.4376
BLM	1	0.058230	9. 039137	1.488	0.1370
OM HISPF	1	-0. 010513 0. 003566201	0.089471	-0.118	0. 90 65
NATE	i	-0.096776	9. 938659 9. 9 77676	0.09 2 -1.246	e. 9265 e. 213 e
BLF	1	0.027444	0.040440	9.679	8, 4975
HHF	1	-0. 065317	0. 031464	-2. 976	0.0381
OF	1	0. 052538	3. 878281	8.672	0.5018
HCA? ENG2LANG	1	-0.00675345	0.025182	-0.240	0.8106
MDENSLAN	i	-0.920410 0.132924	9. 039569 0. 068980	-0. 316 1 . 9 27	0.6060 0.05 42
RES	i	-0.00946018	0. 030701	-0. 3 6 8	0. 7588
EAST	1	0. 040895	0.028993	1.411	0. 1586
SOUTH	1	e. 936267	8. 0 24741	1.467	0. 1427
WEST LMEXP	1	0.687373	0. 931364 9. 9993681131	٤، 791	0. 0053
MOLMEXP	i	-0. 96035 5	0.03581131	4. 184 -0. 693	0. 0001 0. 4901
TENURE.	ī		9.0003602705	-0. 270	0. 7871
MOTENURE	1	-0. 836384	f. 1947 0 0	-0.348	●. 7283
TEST		9.9897875858	9. 69143867	0.492	0.6229
MDTEST ENROLL	1	9. 871281	Ø. ØA9988	0.752	0. 4284
POSTO	i	-8.013536 8.057545	0. 0√ 2399 0. 031080	-0.445 1. ₆ 52	0.6562 0.0 643
POST1	1	6.043508	0.038832	-1.120	0. 2627
POST2	1	-0.0630 0 8	0.074117	-6. A50	0. 3954
INDETER	1	0.0108A3	0.029438	e. 37¢	0. 7117
MDPOST WORKCOMP	1	-0.043317 -0.06745921	0.069368	-0. 624	0.5324
MDWKCOMP	i	0. 361369	0.014292 0.134675	-0. 38 2	9. 7025
EIGHT	ī	-:7 012794	0. 0215/7	●. 456 •. 593	0. 6487 0. 5533
'DEIGHT	1	G. 025314	8. 829408	0.861	0. 3894
GPA10	1	9.007451496	0.013269	9. 48B	9. 6256
NDGPA10 WORKINHS	1	0.024502 -0.015973	9. 63 7795	0.648	0. 5169
SPOUSE	i	6. 034233	8. 9 24938 8. 8 27446	-0.64 1 1.247	8.5218
KID	1	0.011382	9. 032252	1. 247 0. 353	0.2125 0.7242
URBRURAL	1	-0. 033793	0.019464	-1.736	●· 682 7
PROFTECH MGR	1	-0.131106	0.061922	-2.117	0.0344
SALES	1	0. 9 31 5 10 -0. 15 6 449	0. 075777 0. 047011	0. 417	9. 67 6 6
CLERK	i	-0.030139	8. 63963 7	-3.54 -2.36	0. 0094 6. 0211
CRAFT	1	-0. 1031 1P	0. 940 721	-2.55L	6. 6211 6. 6114
OPERATE	1	-0. 846309	0.041002	-1.129	e. 2589
FARM FARMLAB	1	9.775762	9. 263584	2.943	0. 0033
SERVICE	i	-0. 16 58 77 -0. 171 66 6	0 . 87385 4 0. 8 37475	-2.271 -4.563	0.9 233
PHHSERV	ī	-0. 743550	0. 1 0 2262	-4. 563 -7. 271	0. 9991 0. 9991
MDOCCUP	1	-9. 233511	0.112326	-2. 079	6.0378
SELFEST	1	-0. 017159	0.012726	-1.348	0. 1777
MDSLFEST LOCOFCON	1	0. 064447 ~U. 035900	9. 223 89 8	0. 288	0.7734
HD! OCCON	i	~0. 035900 ~0. 047057	0. 015330 0. 189259	-2. 342 - -8. 2 49	0. 0193 0. 0037
ABSENT	1	0.014098	0. 007455346	1.891	0. 8037 0. 0588
DISCIPPR	1	-0. 010085	0. 026424	-0. 382	0. 7028
MDDISPRB	1	6.002409308	0.098709	0. 024	0. 9805
LAWTRBLE MDLAWTRL	1	-9. 051330 -0. 034146	0.046327	-1, 1 08	0.2680
	-	~	8.091899	-0. 372	0.7103

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HS&B, MONTHLY EARNINGS

DEP VARI	ABLE	i "LTMTNPA r			
SOURCE	DF	SUM OF SQUARES		E 11011E	
MODEL	68	172. 187		F VALUE 9.092	PROB) F 9.001 1
ERAOR	1594	443. 920	0.278495	3.032	0.0001
C TOTAL	1662 MSE	616.107 0. 527726			
	MEAN	6. 338159		0.2795 0.2487	
C. V.		8. 326171		0.2457	
VARIABLE	DF	PARAMÉTER ESTIMATE	STANDARD ERROR	T FOR HO: PARAMETER=8	PROB) 'T'
INTERCEP	1	6. 428738	0. 134534	47.785	0.0001
CONC	1	0.046715	0.044482	1.950	0. 2938
LIMCON	1	-0. 918298 0. 9 07 0 6257	8.648223 9.647 271	-0.453 -0.149	●. 65 0 8
MDTRANS	ī	-0. 358329	8. 173 5 87	-2.065	6.8815 0.03 91
ACAD	1	-0.261580	0.067097	-3.899	9. 0001
SRVOC SRPCAO	1	0. 645322 0. 961828	0.0 5442 0 0.11654 0	e. 833 e. 531	9. 4 9 51
CONTR	ī	0. 084062	0. 966994	1.255	e. 5958 e. 2 6 97
LIMCONTR		0.150787	0.071524	2. 108	0. 9352
CONEXPTR HISPM	1	-0.0231 0 0 0.072337	9. 1 9 5741 9. 9 48366	- 0. 218 1.496	0. 8 271
NATH	1	0. 131977	0. 1 0 2317	1.290	0. 13 50 0. 1973
BLM OM	1	-0.020033	0. 056633	-0. 354	0.7236
HISPF	1	-0. 039636 -0. 040390	●. 129469 ●. 0 55942	-0.306 -0.722	0. 7595
NATE	1	-6. 127219	0.112401	-1.132	0. 47 0 4 0. 2579
BLF WHF	1	-0. 076743	0.058519	-1.311	8. 18 99
WTF OF	· 1	-0. 159521 -0. 020830	6.045530 9. 113161	-3. 594 - 9. 184	0.0005
HCAP	1	-0.014957	0. 040 781	-0. 367	8.854 8 8.7138
MDEN2LANG	1	-0. 065332	8.057245	-1.141	0. 2539
SES	i	0. 118118 0. 083220	0. 099 817 0. 0 44425	1.183 1.873	0. 2368
EAST	1	-G. 014916	8. 641954	-9. 356	6. 0 612 0. 7 2 22
SOUTH WEST	1	-0.00265345	0.035802	-9. 974	9. 9489
LMEXP	i	0.017222 0.00242 030 8	8. 6 45299 8. 666 532677	9. 388 4. 544	0. 7039 0. 00 01
MDLMEXP	1	-0. 043955	0. 126514	-0.347	8. 72 8 3
TENURE MDTENURE	1	-0.000511962 0.033924		-0.982	0.3262
TEST	i	9. 901655181	0. 1515 6 6 9. 9829 81824	0. 224 0. 795	0. 8229 0. 4267
MDTEST	1	-0. 025445	6.139216	-0. 195	8. 8451
ENROLL POSTØ	1	-0. 227645 0. 057594	6.043989	-5. 175	0. 0001
POSTI	ī	-0.22i028	0.0 44974 0.0 56192	1.281 -3.933	0. 2005 0. 0001
POSTE	1	-0. 255934	0. 1 0 7251	-2.386	0. 0 171
INDETER MDPOST	1	-0. 098771 -0. 096439	0. 04 2597 0. 1 00 379	-2.319	0. 0205
HORKCOMP	1	9. 842617	9. 020681	-0. 961 2. 0 61	0. 3368
MDWKCOMP	I 1	-0. 121033	0. 194831	-0. 621	0. 0395 0. 5346
MDEIGHT	i	0.009799736 0.00435298	0.031224 0.042544	0. 314	0. 7537
GPA10	1	0.011806	e. 022 99 5	0. 182 0. 534	0. 9185 0. 5932
WORK INHS	1	0. 074939 0. 002949235	0. 0 54691	1. 376	0. 17 9 8
SPOUSE	i	0. 077975	0.036075 0.039715	0. 9 79	0. 9371
KIO URBRURAL	1	0.010334	Ø. 046670	1.963 0. 221	8. 6498 8. 8248
PROFTECH	1	-0. 844497 -0. 178175	6. 6 28166	-1.580	0.1143
MBR	1	0. 162697	0. 9896 9 5 0. 1 99 653	-1. 988 1. 484	0.0469
SALES CLERK	1	-0. 267314	0.0680 27	-3. 930	9. 1381 9. 9001
CRAFT	i	-0.201777 0.019779	0. 056488 0. 058925	-3. 572	0. 0004
OPERATE	1	0.80211042	0. 059332	e. 33 <u>6</u> e. 936	9. 7372
Farm Farmlab	1	1.041696	0.381418	٤. 731	0. 9716 9. 90 64
BERVICE	i	-0. 053726 -0. 263532	0.1 0 5713 9. 0 54228	-0. 508 -4. 969	0. 6114
PHHSERV	1	-1.1614 8 6	O. 147978	-4. 860 -7. 849	0. 0001 0. 0001
MDOCCUP BELFEST	1 1	-0.171450 -0.018932	0.162544	-1. 65 5	6.29 17
MDSLFEST	1	0.062499	0. 018415 0. 323861	-1. 628 0. 193	0. 3041
LOCOFCON MDLOCCON	1	-0. 028 413 `	0. 02218 3	-1. 281	0.8478 0.2004
RBSENT	1	-0.291218 0.622912	9. 273 866	-1.063	0. 2878
DISCIPPR	1	-0.018362	0. 01078 8 0. 03823 7	2. 124 -9. 480	0.0338
Odisprb -Autrble	1	~0.0960 12	6 . 142 83 6	~0. 672	0.6311 0.5016
OLANTRL	1	0.077 9 33 0. 246318	6.067038 8.139889	1.149	0. 2507
	-		0. 132982	1.852	0.0642

NLS, HOURLY EARNINGS

DEP VARIABL	E & LNHRPAY			
	SUM O'	MEAN	•	
SOURCE D	F SQUARE:	SQUARE	F VALUE	PROB) F
MODEL 3	5 49.042695	1.401220	11.299	0.0001
ERROR 99	9 123.889	0.124013		
C TOTAL 1/83	4 172.931			
ROOT MS	E 0. 352154	R-SQUARE	0. 2836	
DEP MEA	N 1.523242	ADJ R-SQ	0. 2585	
c. v.	23. 11873			
	PARAMETER	STANDARD	T FOR HØ:	
VARIABLE D	F ESTIMATE	ERROR	PARAMETER=0	PROB > !T!
-				
INTERCEP	0. 787288	0.117049	6.726	0.0001
	1 0.086511	0.041023	2. 109	0.0352
	1 0.066180	0.033349	1.984	0. 0475
	1 0.122127	0.040813	2. 992	0.0 028
	1 -0.010407	0.030359	-0.343	0.7318
ENG	1 -0.037436	0.043471	-0.861	0.3894
	1 -0.028602	0.046428	-0.616	0.5380
BLM	1 -0.043153	0.047889	-0.901	0.3678
	1 0.059803	0.100892	0. 593	0. 5535
	1 0.025349	0.078046	ø. 325	0.7454
	1 -0.111795	0.043502	-2.570	0.0103
&LF	1 -0.136929	0.045481	-3.011	0.0027
	1 -0.225182	0. 075537	-2. 981	0.0029
	1 -0.201387	0.044223	-4. 554	0.0001
	1 -0.133702	0.067564	-1.979	0.0481
		0.0008098942	2. 499	0.0126
	0.012266	0.063254	Ø. 194	0.8463
GPA10	1 -0.00209956	0.019966	-0. 105	0.9163
	1 -0.0020335746	0.033226	· 0. 101	Ø. 9195
	1 0.085654	0. 053228	1. 339	0.1810
	1 0.048127	0.05 3857	0. 894	Ø. 3717
	1 0.036289	0.03337 0.082206	0. 441	0.6590
	1 -0.046096	0.044210	-1.043	0. 2974
LIMCON	1 0.0001226222	0.037285	0.003	0. 9974
			0. 706	0.4802
	 0.031974 0.055106 	0. 045268 0. 052794	1.044	0. 2968
		0.032794 0.049897	1. 431	0. 1527
		0.05 1021	0. 746	0. 15e7 0. 4561
SRACAD		0.001299642	12.286	0. 4381 0. 0001
	_			0.0240
HOURS	1 0.002498275 1 0.008470982	0.001105296 0.003093939	2.26 0	0. 0240 0. 0063
	=	_	2.738 2.975	0. 00 53
	0.078592	0.080493	0. 976	0. 3291 0. 1055
	1 -0.061184	0.037765	-1.620	
	0.035713	0.031632	1.129	0. 2592
	0.041254	0.039073	1.056	0.2913
POST4M	1 0.221030	0.05 3724	4. 114	0.0001



NLS, MONTHLY EARNINGS

DEP VARI	ABLE:	LNMTHPAY			
		SUM OF	F MEAN		
SOURCE	DF	SQUARES		F VALUE	2002/5
MODEL	34	143.663		14.603	PROB) F
ERROR	1000	289. 359		17.003	0.0001
C TOTAL	1034	433.022	= 		
ROOT	MSE	0.537921		A 2246	
	MEAN	6. 479739	•	0.3318	
c.v.		8. 30158	• • • • • • • • • • • • • • • • • • • •	0.3090	
		PARAMETER	STANDARD	T FOR HØ:	
VARIABLE	DF	ESTIMATE		PARAMETER=0	***
			ENNON	FHKHIIC I CK=0	PROB > !T!
INTERCEP	1	5.477210	0.171961	31.852	0.0004
NEAST	1	0.162490		2. 596	0.0001
SOUTH	1	0.217871		4. 304	0.0096
WEST	1	0.260260		4. 195	0.0001
RURAL	1	-0.020342			0.0001
ENG	1	-0.058782		-0.439	0.6610
HISM	1	-9.021758		-0.885	0. 3761
BLM	1	-0.038208		-0.307	0.7591
NATM	1	0. 040287		-0.5 22	0.6015
OM	1	0.114491	0.119138	0. 261	0.7938
HISF	1	-0.222974	0. 066 172	0. 961	0.3 368
BLF	1	-0.276360		-3. 370	0.0008
NATE	1	-0.371784	0.069115 0.115142	-3. 999	0.0001
WHF	1	-0.327281	0.067213	-3.229	0.0013
OTHE	1	-0.218029	0.067213 0.103083	-4.869	0.0001
AFQT	1	0.003019216	0. 001236897	-2.115	0.0347
MDAFQT	•	0.035170	0.096621	2.441	0.0148
GPA10	1	-0.017113	0. 030491	0.364	0.7159
MDGPA10	1	0.032000		-0.561	0. 5747
CONTR	ī	0. 239686	0.050740	0.631	0. 5284
LIMCONTR	ī	Ø. 128564	0.0 97489	2.459	0. 0141
CONEXPTR	i	0.074770	0.082219	1.564	0. 11 8 2
CONC	ī	-0.041855	0.125569	0.595	0. 551 7
LIMCON	1	0.008249815	9. 067531	-0.620	0. 5355
CONEXP	ī	0.061992	0. 05695 1	0.145	0. 8849
ACAD	ī	0.05 3926	0.069144	0. 897	0.370 2
SRVOC	1	0. 134162	0. 080629	0. 669	0. 5038
SRACAD	i	0. 134162 0. 052862	0.076177	1.761	0 .0 785
LMEXP	î		0.077935	0. 678	0.4977
SESTEEM	1	0.002437332	0.0001949882	12.809	0.0001
MDESTEEM	_	0.013900	0.004723008	2.943	0.0033
ENROLL	1	0.039087	0.122932	0. 318	Ø. 7506
POSTØ1	1	-0.485082	0.055 025	-8.815	C. 000 1
POST23		0.094618	0.048239	1.961	0.0501
POSTAM	1	0.030058	0.059680	0. 504	0.6146
, au . 717	1	0. 199438	0. 082064	2. 430	0.0153
			192		

ERIC

TABLE C.28
HS&B, HOURLY EARNINGS

DEP VARIABLE	: LNHRPAY			
SOUFCE OF	SUM OF SQUARES	MEAN Scuarf	F VALUE	PROB>F
POCEL 1120	29.012959 119.412 146.425	0.426661	4.002	0.0001
Prot Mse Dep Meån C.V.	0.326524 12.66982	P-SGUARE ACJ R-SG	8:1466	
VARIABLE DF	PAFAMETER ESTIMATE	STANDARD FREE	T FOR HO: FAR AMETER=0	PROB > ITE
PERSONAL PROPERTY OF THE PROPE		0 - 0 74 4 6 4 0 - 0 15 3 2 3 0 - 12 3 1 4 3 0 - 0 2 3 1 4 3 0 - 0 1 6 2 3 2	873463457883861586660020709120214688291227724428574460413574143751434767670967096669174347676709709670967097097097097097097097097097097097097097	16010571187071093848239\$8314011888335389\$ 1\$82245366667762119917332667 01864376905859\$245277\$1498208563880760 3\$91418463366000700007100003278867613 01677750906357321049774236001164346336048970901460709749020000000000759607458 01677751906437197321078971200116437463360489709000000000000000000000000000000000

TABLE C.28
HS&B, MONTHLY EARNINGS

DEF VARI	ABLE	: LNMTHPAY			
SOUPCE	DF	SUM DI SOUARE	F MEAN Scuare	F VALUE	88800
PORFL ERFOR E TOTAL	1120	37.452989 133.641 171.09	0 550770	4.616	PR08>F 0.0001
CFP (MSE ME AN	0.345430 6.607113 5.22016	R-SOUAPE ADJ R-SO	8:2193	
VAR JAPLE INTEPCEP	DF	PAPAMETER ESTIMATE	STANDARD ERRER	T FOR HOT PARAMETER-O	PROB > T
CLOWAGE TO SET T	*****	0413957311471154977448837164737111383778541744647983116835573573735583775586310885789579587795879956310885789584397958775584459158577558445910087795844597795877559857755985775564857756447008775559775544769758447008775844700877584470087758485775648577564857756477508577564857756477508577564857756477575775648577564775775844764775775775775775775775775775775775775775	C-010774	8082586340468303064280854384233226546109 014 19 1103415612040251228032926 5473512514977389955284629338429926546109 014 19 1103415612040251228032926 400010101200000000000000000000000000000	1587003977630070036344483420358070707262 321020693300122244411223587626939050500000000000000000000000000000000



NLS, HOURLY EARNINGS

DEP VARIA	ABLE:	LNHRPAY			
		SUM OF	MEAN		
SOURCE	DF	SQUARES	SQUARE	F VALUE	PROB)F
MODEL	35	31.174577	0.890702	7.838	0.0001
EXROR	723	82.156429	0. 113633		
C TOTAL	758	113.331			
ROOT		0.337094	R-SQUARE	0. 2751	
DEP N	·	1.587917	ADJ R-SQ	0.2400	
C. V.		21.22872			
			•		
		PARAMETER	STANDARD	T FOR HØ:	
VARIABLE	DF	ESTIMATE	ERROR	PARAMETER=0	PROB > !T!

INTERCEP	1	1.178165	0.162196	7. 264	0.0001
NEAST	1	0.055255	0.047338	1. 167	0.2435
SOUTH	ī	0.042070	0.038979	1.079	0.2808
WEST	1	0.104755	0.047114	2. 223	0.0265
RURAL	1	-0.045896	0.034819	-1.318	0.1879
ENG	1	0.008370971	0.049067	0. 171	0.8646
HISM	ī	0.004987169	0.050350	0.099	0.9211
BLM	1	-0.029588	0.051690	-0. 572	0.5672
NATM	ī	0. 1262 5 8	0.105094	1.201	0.2300
OM	ī	0.002714287	0.086010	0.032	0.9748
HISF	ī	-0.127823	0.047674	-2.681	0.0075
BLF	1	-0.173052	0.050520	-3. 425	0.0006
NATE	i	-0.138196	0.084852	-1.629	0.1038
WHF	ī	-0.165086	0.049261	-3. 35 1	0.0008
OTHE	i	-0.082073	0.078446	-1.046	Ø. 295B
AFQT	1	0.002593316		2.918	0.0036
MDAFQT	1	-0.019213	0.069582	-0. 276	0.7825
GPA10	i	-0.020012	0.022671	-0.883	0.3777
MDGPA10	ī	-0.00649354	0.037242	-0.174	0.8616
CONTR	i	0.080881	0.064912	1.246	0.2132
LIMCONTR	i	0.028388	0.058562	0. 485	0.6280
CONEXPTR	ī	-0.036210	0.086132	-0. 420	0.6743
CONC	i	-0.020154	0.050189	-0. 402	0.6881
LIMCON	i	0.015539	0.042328	0. 367	0.7137
CONEXP	1	-0.010716	0.051666	-0. 207	0.8357
ACAD	í	0.128792	0.060288	2. 136	0.0330
SRVOC	ī	0.094382	0.055138	1.712	0.0874
SRACAD	i	0.047915	0.058615	0.817	0.4139
LMEXP	i	0.001465267	0.0001395422	10.501	0.0001
HOURS	i	-0.004921	0.002259245	-2. 178	0.0297
SESTEEM	ī	0.007587541	0.003431456	2.211	0.0273
MDESTEEM	1	0.095808	0.093435	1. 025	0.3055
ENROLL	1	-0.075163	0.049020	-1.533	0.1256
POSTØ1	1	0.042547	0. 034 55 6	1.231	0.2186
POST23	1	0.019421	0.045229	0. 429	0.6678
		0.019421 0.252083	0. 059568	4. 232	0.0070 0.0001
POST4M	1	e. <2<643	Ø. Ø37366	7. EJE	2.0001



NLS, MONTHLY EARNINGS

DEP VOR	(ABI E	E: LNMTHPAY			
J	· MDEE				
SOURCE	DF	SUM 0			
MODEL	34			F VALUE	PROB) F
ERPOR	724			8.396	0.0001
C TOTAL	758				
	MSE				
DEP				0. 2828	
C. V.	MEMIA			0.2491	
U. V.		5. 1732	7		
		PARAMETE	R STANDARD	T 500	
VARIABLE	DF	ESTIMAT		T FOR HO:	
			באתטא	PARAMETER=0	PROB > !T!
INTERCEP	1	6.20523	7 0.131375	47 655	
NEAST -	• 1	0.046249		47. 233	0.0001
SOUTH	1	0.050056		0. 943	0. 3462
WEST	1	0.12381		1.238	0. 2159
RURAL	1	-0.02563		2.537	0.0114
ENG	1	0.0008061561		-0.712	0. 4768
HISM	1	-0.0069332		0.016	0.98 74
BLM	1	-0.055369		-0. 133	Ø. 8944
NATM	1	0.104519		-1.035	0.3012
OM	1	0.016612	100301	0. 959	0. 3377
HISF	1	~0.171464		0. 186	0.8 522
BLF	1	-0.217805		-3. 491	0.0005
NATE	ī	-0. 201149		-4. 185	0.0001
WHF	i	-0.204848		-2. 296	0.0219
OTHF	î			-4. 031	0.0001
AFQT	i	-0.091212		-1.122	0.2624
MDAFQT	1	-0.002/16/12	0.0009213054	2. 949	0.0033
GPA10		-0. 036756		-0.510	0.6103
MDGPA10	1	-0.033862		-1.446	0.1487
CONTR		-0.00967564	0. 038615	-0. 251	0.8022
LIMCONTR	1	0. 104890	0. 067239	1.560	0.1192
CONEXPTR	1	0.021621	0.060 712	Ø. 356	0.7219
CONC	1	-0.055459	0.089279	-0.621	0.5347
LIMCON	1	-0. 031 982	0.05 2013	-0.615	0.5388
CONEXP	1	0.00962456	0.043887	0.219	Ø.8265
ACAD	1	-0.017313	0. 053564	-0. 323	Ø. 7466
	1	0. 138868	0.062494	2. 222	0.0266
SRVOC	1	0. 10695 3	0.05 7139	1.872	0.0616
SRACAD	1	0.046882	0.060780	0.771	0.4408
LMEXP	1	0.001474066	0.0001446964	10.187	0. 4406 0. 0001
SESTEEM	1	0.007035803	0.003556983	1. 978	0.0483
MDESTEEM	1	0.102233	0.096883	1.055	
ENROLL	1	-0.089274	0.050804	-1.757	0. 2917
POSTØ1	1	0. 049255	0.035828	1.375	0.0793
POST23	1	0.027533	0.046884	0.589	0.1696
POST4M	1	0. 265025	0.061741	4. 293	0. 5558
				7.633	0.0001



TABLE C.29

HIGH SCHOOL CURRICULUM BY RACIAL/ETHNIC BACKGROUND AND GENDER

Black Male	Hi spanic Male	White Male	Black Female	. Hispanic Female	White Female
6.1	7.9	16.5	4.5	6.9	12-1
17.1	21.1	25•5	26.9	34.8	38.7
28 • B	28.7	37.0	23.3	28.3	30.7
47.9	42.2	21.0	45.4	30•1	18.5
	6•1 17•1 28•B	Male Male 6.1 7.9 17.1 21.1 28.B 28.7	Male Male Male 6.1 7.9 16.5 17.1 21.1 25.5 28.8 28.7 37.0	Male Male Female 6.1 7.9 16.5 4.5 17.1 21.1 25.5 26.9 28.8 28.7 37.0 23.3	Male Male Female Female 6.1 7.9 16.5 4.5 6.9 17.1 21.1 25.5 26.9 34.8 28.8 28.7 37.0 23.3 28.3

SOURCE: National Longitudinal Survey of Labor Market Experience -

New Youth.

NOTE: All numbers are percentages within the column;

curriculum categories based upon high school transcripts.



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